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FULL CONTENTS CLAIM + DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION TECHNICAL PROBLEM MEANS DESCRIPTION OF DRAWINGS DRAWINGS WRITTEN AMENDMENT

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FULL CONTENTS

[Claim(s)]

[Claim 1] In the information service method which transmits, data through a communication line to the attested communication terminal [connection request / from said communication terminal] The offer method of the information characterized by having the terminal specific information receiving step which receives the terminal specific information which specifies the communication terminal concerned, and the authentication stage which attests whether said connection request is recognized based on said terminal specific information which received.

[Claim 2] In the information service method which transmits, data through a communication line to the attested communication terminal [connection request / from said communication terminal] The terminal specific information receiving step which receives the terminal specific information which specifies the communication terminal concerned, The customer specific information receiving step which receives the customer specific information which specifies a customer, and the customer specific information for authentication which is the customer specific information beforehand memorized for said every terminal specific information, The offer method of the information characterized by having the authentication stage which attests whether said received customer information is compared and said connection request is recognized based on the comparison result concerned.

[Claim 3] The offer method of the information which is equipped with the address grant stage which gives the Internet protocol address to said attested communication terminal in the offer method of information according to claim 1 or 2, and is characterized by transmitting data using said given Internet protocol address.

[Claim 4] In the information service method which transmits, data through a communication line to a communication terminal [connection request / from said communication terminal] The terminal specific information receiving step which receives the terminal specific information which specifies the communication terminal concerned, the customer information beforehand

memorized for said every communication terminal -- ** -- [stage / of requiring transmission of said customer information corresponding to said terminal specific information among them / customer transmitting information demand] The offer method of the information characterized by having the data transmitting stage which transmits the data corresponding to said customer information to said communication terminal based on said transmitted customer information.
[Claim 5] Claim 1 or 4 -- the offer method of the information characterized by said terminal specific information being a subscriber's number in said communication line in the offer method of information given in either.
[Claim 6] It is the offer method of the information characterized by including the processing information for specifying the processing performed in order that said customer information may obtain the data corresponding to the customer information concerned in the offer method of information according to claim 4.
[Claim 7] It is the offer method of the information characterized by including personal information required for the processing performed in order for said customer information to be the personal information of the customer corresponding to the customer information concerned in the offer method of information according to claim 4 and to obtain the data corresponding to the customer information concerned.
[Claim 8] The offer method of the information characterized by having the accounting stage which generates the accounting information corresponding to said customer information in the offer method of information according to claim 4 according to transmission of said data.
[Claim 9] In the information service equipment which transmits, data through a communication line to the attested communication terminal [connection request / from said communication terminal] Offer equipment of the information characterized by having a terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, and the authentication means which attests whether said connection request is recognized based on said terminal specific information which received.
[Claim 10] In the information service equipment which transmits, data through a communication line to the attested communication terminal [connection request / from said communication terminal] A terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, A customer specific information receiving means to receive the customer specific information which specifies a customer, and the customer specific information for authentication which is the customer specific information beforehand memorized for said every terminal specific information, Offer equipment of the information characterized by having the authentication means which attests whether said received customer information is compared and said connection request is recognized based on the comparison result concerned.
[Claim 11] Offer equipment of the information which is equipped with an address grant means

to give the Internet protocol address to said attested communication terminal in the offer equipment of information according to claim 9 or 10, and is characterized by transmitting data using said given Internet protocol address.

[Claim 12] In the information service equipment which transmits, data through a communication line to a communication terminal [connection request / from said communication terminal] A terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, A customer information storage means to memorize customer information for said every communication terminal beforehand, and a customer transmitting information demand means to require transmission of said customer information corresponding to said terminal specific information from said customer information storage means, Offer equipment of the information characterized by having a data transmitting means to transmit the data corresponding to said customer information to said communication terminal, based on said customer information transmitted from said customer information storage means.

[Claim 13] Claim 9 or 12 -- the offer equipment of the information characterized by said terminal specific information being a subscriber's number in said communication line in the offer equipment of information given in either.

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the offer method of information and the offer equipment of information which offer information through a communication line to a communication terminal.

[0002]

[Description of the Prior Art] Conventionally, the technology of offering information through a communication line to a communication terminal is known. For example, if it is personal computer communications, a user's communication terminal can be connected to the host computer of a personal-computer-communications company through the telephone line, and the information which a host computer offers can be acquired. Moreover, when accessing the Internet, a user's communication terminal is connected to a provider, and the user is provided with the information on the Internet when a provider makes connection with the Internet by proxy. In this case, the provider offers the information on the Internet by giving an IP address (Internet protocol address) to the connected communication terminal.

[0003]

[Problem to be solved by the invention] In such a Prior art, those who offer the information of a

personal-computer-communications contractor, a provider, etc. are performing procedure for checking whether the connected communication terminal is a regular user's communication terminal. Specifically, the provider of whom connection was required demands transmission of a user ID from a communication terminal first. A communication terminal transmits a user ID to a provider to the demand. A provider will demand transmission of a password from a communication terminal next, if a user ID checks that it is regular ID. A communication terminal transmits a password to the demand. And a provider performs user authentication by distinguishing whether the transmitted password is a password corresponding to the user ID transmitted previously.

[0004] However, in the offer method of such conventional information, probably, since user authentication procedure took time, the user was not able to receive offer of information quickly. Moreover, when the third party had obtained the user ID and the password, there was a possibility of providing an inaccurate user with information. Furthermore, in order to receive offer of the information for which a user asks, the communication terminal was operated, various information may have to be transmitted and it took time and effort very much.

[0005] It aims at realizing the offer method of information and the offer equipment of information which offer information quickly and safely, reducing [this invention is made in order to solve the technical problem mentioned above, and] the operation in a communication terminal.

[0006]

[Means for solving problem] In order to solve the technical problem mentioned above, [invention according to claim 1] In the information service method which transmits, data through a communication line to the attested communication terminal [connection request / from said communication terminal] It is characterized by having the terminal specific information receiving step which receives the terminal specific information which specifies the communication terminal concerned, and the authentication stage which attests whether said connection request is recognized based on said terminal specific information which received. Moreover, invention according to claim 2 data in the information service method which transmits through a communication line to the attested communication terminal [connection request / from said communication terminal] The terminal specific information receiving step which receives the terminal specific information which specifies the communication terminal concerned, The customer specific information receiving step which receives the customer specific information which specifies a customer, and the customer specific information for authentication which is the customer specific information beforehand memorized for said every terminal specific information, Said received customer information is compared and it is characterized by having the authentication stage which attests whether said connection request is recognized based on the comparison result concerned. Moreover, invention

according to claim 3 is set to the offer method of information according to claim 1 or 2. It is characterized by having the address grant stage which gives the Internet protocol address to said attested communication terminal, and transmitting data using said given Internet protocol address. Moreover, invention according to claim 4 data in the information service method which transmits through a communication line to a communication terminal [connection request / from said communication terminal] The terminal specific information receiving step which receives the terminal specific information which specifies the communication terminal concerned, the customer information beforehand memorized for said every communication terminal -- ** -- [stage / of requiring transmission of said customer information corresponding to said terminal specific information among them / customer transmitting information demand] It is characterized by having the data transmitting stage which transmits the data corresponding to said customer information to said communication terminal based on said transmitted customer information. moreover, invention according to claim 5 -- Claim 1 or 4 -- in the offer method of information given in either, said terminal specific information is characterized by being a subscriber's number in said communication line. Moreover, invention according to claim 6 is characterized by said customer information including the processing information for specifying the processing performed in order to obtain the data corresponding to the customer information concerned in the offer method of information according to claim 4. Moreover, in the offer method of information according to claim 4, said customer information is the personal information of the customer corresponding to the customer information concerned, and invention according to claim 7 is characterized by including personal information required for the processing performed in order to obtain the data corresponding to the customer information concerned. Moreover, invention according to claim 8 is characterized by having the accounting stage which generates the accounting information corresponding to said customer information according to transmission of said data in the offer method of information according to claim 4.

[0007] Moreover, invention according to claim 9 data in the information service equipment which transmits through a communication line to the attested communication terminal [connection request / from said communication terminal] It is characterized by having a terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, and the authentication means which attests whether said connection request is recognized based on said terminal specific information which received. Moreover, invention according to claim 10 data in the information service equipment which transmits through a communication line to the attested communication terminal [connection request / from said communication terminal] A terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, A customer specific information receiving means to

receive the customer specific information which specifies a customer, and the customer specific information for authentication which is the customer specific information beforehand memorized for said every terminal specific information, Said received customer information is compared and it is characterized by having the authentication means which attests whether said connection request is recognized based on the comparison result concerned. Moreover, invention according to claim 11 is set to the offer equipment of information according to claim 9 or 10. It is characterized by having an address grant means to give the Internet protocol address to said attested communication terminal, and transmitting data using said given Internet protocol address. Moreover, invention according to claim 12 data in the information service equipment which transmits through a communication line to a communication terminal [connection request / from said communication terminal] A terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, A customer information storage means to memorize customer information for said every communication terminal beforehand, and a customer transmitting information demand means to require transmission of said customer information corresponding to said terminal specific information from said customer information storage means, It is characterized by having a data transmitting means to transmit the data corresponding to said customer information to said communication terminal, based on said customer information transmitted from said customer information storage means. moreover, invention according to claim 13 -- Claim 9 or 12 -- in the offer equipment of information given in either, said terminal specific information is characterized by being a subscriber's number in said communication line.

[0008]

[Mode for carrying out the invention] With reference to Drawings, the form of operation of this invention is explained hereafter.

[0009] 1. composition 1-1. outline **** of an embodiment -- drawing 1 is the figure showing the outline composition of an embodiment first. This embodiment is constituted so that the center 300 which contractors, such as a provider, have may provide a user's communication terminal 100 with information through a communication line (move network 200).

[0010] The communication terminals 100 in a figure are mobile communications terminals, such as a cellular phone and a car telephone, for example, and are connected to the move network 200 through a base station BS. The communication terminal 100 may be equipped with the function which displays the information offered, and you may make it display information on other equipment, such as a connected note type personal computer and an electronic notebook.

[0011] The move network 200 is a communication line concerning mobile communications, such as a cellular phone, and is equipped with the move exchange 201 and INTAWAKU equipment (IWE) 202. The move exchange 201 is the exchange which accommodated the

personal digital assistant which has joined the move network 200. INTAWAKU equipment 202 is the subscriber exchange of center 300 exclusive use, and INTAWAKU equipment 202 and a center 300 are connected by the common carrier leased line.

[0012] A center 300 is for offering the information concerning this invention. In addition, detailed composition is mentioned later. The center 300 is further connected to the Internet 400 and the centers 501, 502, and 503 of the other company. The communication terminal 100 can be provided now with the information offered from Internet servers 401 and 402 on the Internet 400, or the information offered from the centers 501, 502, and 503 of the other company.

[0013] 1-2. Explain the composition of a center 300 with reference to the composition, next drawing 2 of a center. INTAWAKU equipment 202 is connected with the center 300 by the two common carrier leased lines. One system is a system for offering the information on the Internet by providing the service connected to the Internet in a simple procedure. Another system is a system for offering the information which a center 300 holds under high security, and the information which the center of the other company (A company center 501, B company center 502, C company center 503) holds in the form which was suitable for the communication terminal 100 after charging. Hereafter, in explanation of this embodiment, make into an "Internet access service" service which offers information by the former system, and let service which offers information by the latter system be "mobile data utility."

[0014] Moreover, in this embodiment, telephone number No2 of the connection destination of the user at the time of connecting with telephone number No1 of the connection destination of the user at the time of connecting in order to receive offer of an "Internet access service" in order to receive offer of "mobile data utility" have a different number. That is, a user does call origination to the telephone number according to the service which receives offer, performs a connection request, and distinguishes the service which should be provided by the telephone number of a connection destination in the center 300 side. And also in which system, information is offered using the Internet protocol which gave and gave the IP address (Internet protocol address) to the connected communication terminal 100.

[0015] By the way, since an "Internet access service" is service which only provides the communication terminal 100 with the information on the Internet 400 as it is, the not much strict user authentication method is not required. The user is demanding to be quickly connectable in a simple procedure rather. On the other hand, "mobile data utility" is the information which needs accounting, or since it is the information offered based on personal information as mentioned later, the user authentication method that security is higher is required. So, in this embodiment, the connection from the communication terminal 100 shall be received using the user authentication method different, respectively from an "Internet access service" and "mobile data utility."

[0016] In an "Internet access service", it attests only based on the subscriber's number contained in the call setup signal sent when the communication terminal 100 performs a connection request to telephone number No1, and, specifically, an IP address is given. Therefore, the user can access the Internet 400, if it only calls to telephone number No1. Moreover, in "mobile data utility", it attests based on a user ID and a password besides the subscriber's number contained in the call setup signal sent when the communication terminal 100 performs a connection request to telephone number No2. In addition, it mentions later in more detail.

[0017] In order to offer information to the user who uses the communication terminal 100 by such an "Internet access service" and "mobile data utility", [a center 300] It is constituted as a network equipped with the various servers (the agent server 301, the customer server 302, the accounting server 303, a firewall 304, a mail server 305, a contents server 306, Web server 307, and Web server 308 with outside) shown in drawing 2 .

[0018] First, the agent server 301 is a server for performing authentication and cooperation of each server, and also performs processing of conversion of a display format besides being network maintenance and surveillance, offer of application, etc. Moreover, when the data format which can be displayed has a limit in the communication terminal 100, external contents, such as contents on the Internet 400 and contents of the centers 501, 502, and 503 of the other company, are changed into the data of a display format suitable for the communication terminal 100.

[0019] The customer server 302 is a server which memorized the customer information mentioned later, and transmits customer information to other servers of other with directions of an agent server. Other servers which received customer information can perform processing for information service based on customer information. More specifically in operation of an embodiment, an example is given and explained.

[0020] The accounting server 303 is a server which performs processing about accounting concerning offer of information. A fire wall 304 is the server for protecting a center 300 from the exterior connected to the Internet 400, and performs sorting of the data to pass etc. The mail server 305 is equipped with the mailbox and performs processing about an E-mail. A contents server 306 is the server which memorized the information (contents) for providing for the communication terminal 100. Moreover, Web server 307 and Web server 308 with outside are the servers for offering varieties of information, such as a homepage containing the picture using GUI (Graphical User Interface), a character, etc.

[0021] 1-3. Explain the customer information memorized by the customer database, next the customer server 302. Information is recorded for every subscriber's number of the communication terminal 100, and the user (customer) registered in order to receive offer of data utility from a center 300 is managed as a customer database. And the communication

terminal 100 can search data now based on the subscriber's number contained in the call setup signal sent at the time of a connection request.

[0022] Here, drawing 3 is the figure showing the example of the contents of the customer database. The customer database has memorized authentication information, personal information, provided information, functional information, etc. corresponding to a subscriber's number, as shown in drawing 3 . Although user authentication information consists of a user ID, a password, etc. and a user ID and a password are the information which the user registered beforehand at the time of a contract, a password can be updated arbitrarily.

[0023] In this embodiment, a user ID and a password are used as user authentication information (customer specific information for authentication) which specifies the person who connected authentication information, using a subscriber's number as information which specifies the communication terminal 100 linked to a center 300. therefore, above "an Internet access service" If the subscriber's number which specifies the connected communication terminal 100 is registered into the customer database, information to providing ["mobile data utility"] Information is not offered if the user authentication information which specifies the subscriber's number and user who specify the connected communication terminal 100 is not registered into a customer database. Namely, it sets to "mobile data utility". Since connection is permitted for the first time in accordance with the combination of these information that the information transmitted as the subscriber's number and user authentication information for specifying the communication terminal 100 memorized beforehand Connection is not permitted even if a third party sends a connection request from communication terminal 100' which is different in the communication terminal 100 which obtains unjustly the user ID and password which are user authentication information, and is registered into the customer database. Or even if it is the case where an inaccurate user uses the communication terminal 100 registered into the customer database, if the inaccurate user concerned does not know the user ID and password which are user authentication information, he will be permitted connection.

[0024] Next, the personal information on a customer database consists of a subscriber name, an address, a birth date, etc. When such a customer's personal information offers characteristic information for each customer of every, it is transmitted to the server which performs processing concerning offer of the information. In addition, in this embodiment, after performing user authentication in "mobile data utility" so that a third party cannot use personal information freely, it is transmitted to other servers.

[0025] Moreover, as for provided information, the information which shows ** just is included in whether a customer asks for offer of what kind of information at the time of connection. For example, and if it chooses beforehand and registers rather than choosing the information for which a user asks whenever it connects when information to receive offer in beforehand has become settled, offer of the information can be received quickly. [the information that a center

300 can be offered] And functional information is information about the function which the communication terminal 100 has, for example, is shown by a model, a part number number, etc. of the communication terminal 100. In this embodiment, the display format and the amount of information which transmits of contents can be adjusted now based on this functional information.

[0026] 2. Explain operation of an embodiment, next operation of this embodiment which has the composition mentioned above.

[0027] 2-1. With reference to the sequence flow shown in authentication operation ****, drawing 4 , and 5, the case of an "Internet access service", and in the case of "mobile data utility", divide the authentication operation in this embodiment, and explain it.

[0028] In 2-1-1. "Internet access service", the authentication operation in the case of an "Internet access service" is explained first. The communication terminal 100 sends the call setup signal which contains a subscriber's number to the move network 200, and performs a connection request (S101). The move network 200 transmits the received subscriber's number to a center 300 while performing a line connection based on a connection request (S102).

[0029] A center 300 attests based on the received subscriber's number, and negotiation which is processing of an establishes synchronization etc. between the communication terminals 100 is performed (S103). Authentication is performed here based on whether the received subscriber's number is registered into the customer database in the customer server 302, as explained previously. And after negotiation is completed, a center 300 assigns an IP address to the communication terminal 100, and transmits the assigned IP address to the move network 200 (S104). The IP address which is not used for other personal digital assistants etc. out of the IP address which the center 300 has managed beforehand at the time of authentication is used for assignment of an IP address. Next, the move network 200 transmits an IP address to the communication terminal 100 (S105). Then, in between the communication terminal 100 and a center 300, data transmission and reception using an IP address is performed (S106).

[0030] Thus, it sets to an "Internet access service". Since it attests only based on the sender number transmitted at the time of a connection request Becoming unnecessary [the procedure to which a user transmits a user ID and a password], the procedure for authentication can be simplified, the user can access the Internet quickly, and a center 300 becomes possible [providing a user with information quickly] about the information on the Internet 400.

[0031] The authentication operation the case of 2-1-2. "mobile data utility", next in the case of "mobile data utility" is explained. The communication terminal 100 sends the call setup signal which contains a subscriber's number to the move network 200, and performs a connection request (S201). The move network 200 transmits the received subscriber's number to a center 300 while performing a line connection based on a connection request (S202). Next, a center

300 performs negotiation which is processing of an establishes synchronization etc. between the communication terminals 100 (S203). If the synchronization with a center 300 and the form terminal 100 is established, a center 300 will transmit user authentication information requirements (S204), and the move network 200 will transmit user authentication information requirements to the communication terminal 100 (S205). The communication terminal 100 transmits a user ID and a password as user authentication information (S206), and the move network 200 transmits a user ID and a password to a center 300 (S207).

[0032] The agent server 301 of the center 300 receives beforehand the user authentication information corresponding to the user authentication information which should be received from the communication terminal 100 in Step S206 from the customer server 302 based on the subscriber's number received in Step S202. And it attests by distinguishing whether the user authentication information which the user ID and password which were received in Step S206 read beforehand, and the user authentication information received from the customer server 302 are in agreement. If authentication is completed, a center 300 will transmit an authentication reply (S208), and the move network 200 will transmit an authentication reply to the communication terminal 100 (S209). Then, a center 100 assigns IP dress and transmits (S210). The move network 200 transmits an IP address to the communication terminal 100 (S211). Then, in between the communication terminal 100 and a center 300, data transmission and reception using an IP address is performed (S212).

[0033] Thus, since the agent server 301 can read user authentication information beforehand based on the subscriber's number transmitted at the time of connection, even when performing user authentication based on two or more information, including a user ID, a password, etc., it becomes possible [processing quickly]. Moreover, since the communication terminal 100 can be specified with the subscriber's number transmitted at the time of a connection request and a user can be specified with the user ID and password which are transmitted as authentication information, security becomes high more.

[0034] 2-2. Give and explain an example about operation in the case of coordinating each server and offering various kinds of information to the communication terminal 100 in the example, next center 300 of information service operation.

[0035] (1) The 1st example : when personal information is ******(ed) between servers and it offers information, even if it does not transmit personal information from the communication terminal 100 by ******(ing) personal information between servers probably, explain the case where the communication terminal 100 is provided with the information for which a user asks. For example, since the subscriber's number received in Step S202 shown in drawing 5 is "010-11-12345" when the user who showed (A) of drawing 3 connects, it turns out that the information to which a user asks for offer is "fortune-telling service." In this example, "fortune-telling service" is information offered based on the contents memorized by the contents server

306. Then, the agent server 301 transmits personal information (a subscriber name, birth date) required since "fortune-telling service" is provided to a contents server 306. A contents server 306 offers "fortune-telling service" information based on the received personal information.
[0036] Here, drawing 6 and drawing 7 are the examples of the information to offer. First, drawing 6 is a required information input screen in "fortune-telling service" which a contents server 306 provides. This screen is a screen for asking a user for an input, when personal information is not transmitted to a contents server 306. If the execution button JB is operated on a screen after a user inputs personal information, such as a name and a birth date, into the input positions N1 and N2 shown in drawing 6 , the fortune-telling result shown in drawing 7 will be displayed. However, as shown in drawing 3 (A), "fortune-telling service" is registered as provided information for which a user asks, and it sets in "fortune-telling service". Since the personal information which a user should input into the input positions N1 and N2 is beforehand transmitted to the contents server 306 from the customer server 302 based on the directions from the agent server 301, a contents server 306 performs processing which performs fortune-telling based on personal information. That is, the application on which fortune-telling is performed and displayed is started, and processing which transmits the data for displaying a fortune-telling result (referring to drawing 7) to the communication terminal 100 is performed.
[0037] Thus, since the information for which a user asks is registered beforehand, after connection, the center 300 can perform processing for displaying the information for which a user asks quickly, and can offer the information for which a user asks quickly. Moreover, since required personal information is beforehand transmitted to the contents server 306, even if a user does not perform special operation of an input etc. using the communication terminal 100, he can receive offer of the information based on personal information.
[0038] (2) The 2nd example : when external information was offered, in the 1st example of the above, the case where information was offered using the contents server 306 in a center 300 was explained, but explain the example in the case of offering the information on the exterior of a center 300 here. For example, since the subscriber's number received in Step S202 shown in drawing 5 is "010-22-12345" when the user who shows drawing 3 (B) connects, it turns out that the information to which a user asks for offer is "A company weather report." In this example, "A company weather report" is information offered based on the contents memorized in the A company center 501. Then, the agent server 301 receives the data for displaying "A company weather report" on the communication terminal 100 from A company center 501, and transmits to the communication terminal 100.
[0039] Moreover, the agent server 301 transmits the information about the contents transmitted from A company center 501 to the accounting server 303. The accounting server 303 has memorized the account data about the information received from A company center 501, and

performs processing which computes the accounting information which starts the user concerned whenever it offers the information on A company center 501 to a user. That is, the accounting server 303 performs processing for executing by proxy and collecting accounting concerning the information which A company center 501 offers for A company. In addition, it is the same when receiving the information which not only A company center 501 but B company center 502 or C company center 503 offers.

[0040] Thus, since it is not necessary to perform procedure for accounting among the centers 501, 502, and 503 of the other company, even when it provides a user with the information which the centers 501, 502, and 503 of the other company offer, information can be offered quickly.

[0041] (3) The 3rd example : when it offers information according to the function of the communication terminal 100 next, explain the case where information is offered according to the function of the communication terminal 100. For example, since the subscriber's number received in Step S202 shown in drawing 5 is "010-33-12345" when the user who shows drawing 3 (C) connects, it turns out that the information to which a user asks for offer is "http://www.xxx." In this example, "http://www.xxx" is URL (Uniform Resource Locator), and shows the position (= contents server's address) where the contents on the Internet 400 are memorized. However, only the case where the connected communication terminal 100 can display only a text, and information with little amount of data may be able to be displayed. In such a case, it sets to this embodiment. A fire wall 304 restricts what can be perused among the contents on the Internet 400, or the contents on the Internet 400 are changed into the form which can display the communication terminal 100 by the agent server 301.

[0042] The agent server 301 transmits first URL memorized by the customer server 302 to a fire wall 304. A firewall 304 judges whether URL which received is URL which cannot be perused based on the limitation information memorized beforehand, and when it distinguishes that it is URL which cannot be perused, it transmits that to the communication terminal 100. On the other hand, when it distinguishes that an inspection is possible, the specified contents are received from the Internet 400 and it transmits to the agent server 301. Next, the agent server 301 distinguishes whether the contents on the Internet 400 can be displayed on the communication terminal 100 as it is based on the functional information received from the customer server 302.

[0043] For example, [even when the communication terminal 100 can display a picture in the functional information shown in drawing 3 when a function is "V1", and the contents on the Internet 400 contain image data, can make it display on the communication terminal 100 as it is, but] When a function is "V2", the communication terminal 100 cannot display a picture. Here, since it is registered with "V2" as functional information on a user's communication terminal 100 shown in drawing 3 (C), the agent server 301 will be distinguished if it cannot

display as it is. When it could not display then and distinguishes, the agent server 301 changes the data received from specified URL into the form which can display the communication terminal 100, and transmits to the communication terminal 100. On the other hand, when it distinguishes that displaying as it is is possible, the agent server 301 transmits the data received from specified URL to the communication terminal 100 as it is.

[0044] thus, when a user asks for the information which cannot be displayed in the communication terminal 100 which a user owns Since an inspection can be restricted, or a display format can be transformed and it can provide, the load to the communication terminal 100 which transmits the data in which display processing is impossible to the communication terminal 100 cannot be applied, and information can be offered quickly.

[0045] 3. This invention is not limited to the embodiment which is a modification and which was mentioned already, and various kinds of following deformation is possible for it.

[0046] In the above-mentioned embodiment, although the move network 200 is explained to an example as a communication line, you may be a fixed network. In this case, the telephone of fixation etc. corresponds to the communication terminal 100, and the exchange of a fixed network corresponds to the move exchange 201. Moreover, when the communication terminal 100 does not transmit a subscriber's number at the time of call origination, the exchange recognizes a subscriber's number and you may make it transmit to a center 300. In this case, at Step S201 shown in Step S101 shown in drawing 4 , and drawing 5 , the call signal which does not contain a subscriber's number is transmitted from the communication terminal 100.

[0047] [the communication terminal] in the above-mentioned embodiment although the communication terminal 100 has transmitted to the call setup signal including a subscriber's number Not only this but the communication terminal 100 transmits a certain information (for example, serial number) which specifies a communication terminal as the move network 200, and it changes into a subscriber's number the information which the move network 200 received, and you may make it transmit to a center 300. Moreover, in the center 300, not only a subscriber's number but the communication terminal 100 should just memorize the information corresponding to the terminal specific information included in a call setup signal.

[0048] Moreover, the user ID and password for the authentication which can be "mobile data utility" Set have transmitted, after having an authentication demand from a center 300, but you may make it transmit a sender number, a user ID, and a password simultaneously at the time of a connection request. You may make it transmit a user ID or not only a password but further two or more information as authentication information.

[0049] Moreover, although the above-mentioned embodiment gave and explained three examples as an example of information service, it is not limited to these. For example, the information for which a user asks is retrieved from a keyword, and you may make it display it, and may make it transmit the information for which a user asks with an E-mail. Although it shall

charge in the above-mentioned example about the information offered from the centers 501, 502, and 503 of the other company (the 2nd example) You may make it charge to the information offered not only in this but in the contents server 30, and the information on the Internet 400, and it may not charge about the information offered from the centers 501, 502, and 503 of the other company. Moreover, when receiving offer of information from the center 501 of the other company shown in Example 2, as it was shown in Example 1, personal information may be received from the customer server 302, and you may offer the information based on personal information. For example, in the case where it is shown in the 2nd example, you may enable it to offer the weather report according to the user's address, and in this case, the agent server 301 extracts only the weather report information of Tokyo Metropolitan Government which is a user's address ground, and transmits to the communication terminal 100.

[0050] Moreover, although the information for which a user asks beforehand is memorized as customer information in the above-mentioned embodiment and explained as what is provided with the information for which it asks immediately after authentication When provided information in particular is not memorized, the list of information with which a main menu etc. can be provided, for example is displayed, and you may make it make a user choose after connection.

[0051] Moreover, although it assumes that the information to offer is offered by a character or image data, you may make it offer not only this but a voice information in the above-mentioned embodiment.

[0052]

[Effect of the Invention] As explained above, according to this invention, the offer method of information of offering information quickly and safely is realizable, reducing the operation in a communication terminal.

[Brief Description of the Drawings]

[Drawing 1] It is the figure showing the entire configuration of an embodiment.

[Drawing 2] It is the figure showing the composition of a center.

[Drawing 3] It is the figure showing the example of contents of a customer database.

[Drawing 4] It is the figure showing the sequence of the authentication operation in an Internet access service.

[Drawing 5] It is the figure showing the sequence of the authentication operation in mobile data utility.

[Drawing 6] It is the display example of the information which needs the input of personal

information.

[Drawing 7] It is the display example of the information offered based on personal information.

[Explanations of letters or numerals]

100 .... Personal digital assistant

BS .... Base station

200 .... Move network

201 .... Move exchange

202 .... INTAWAKU equipment

300 .... Center

301 .... Agent server

302 .... Customer server

303 .... Accounting server

304 .... Firewall

305 .... Mail server

306 .... Contents server

307 .... Web server

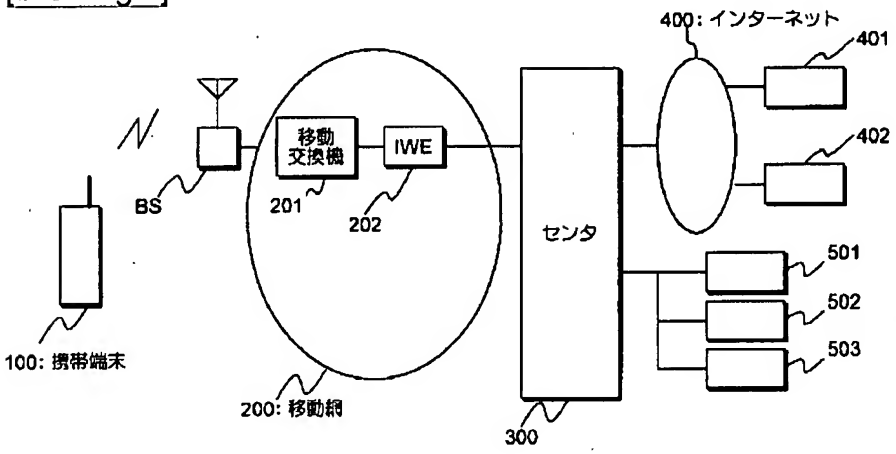
308 .... Web server with outside

400 .... Internet

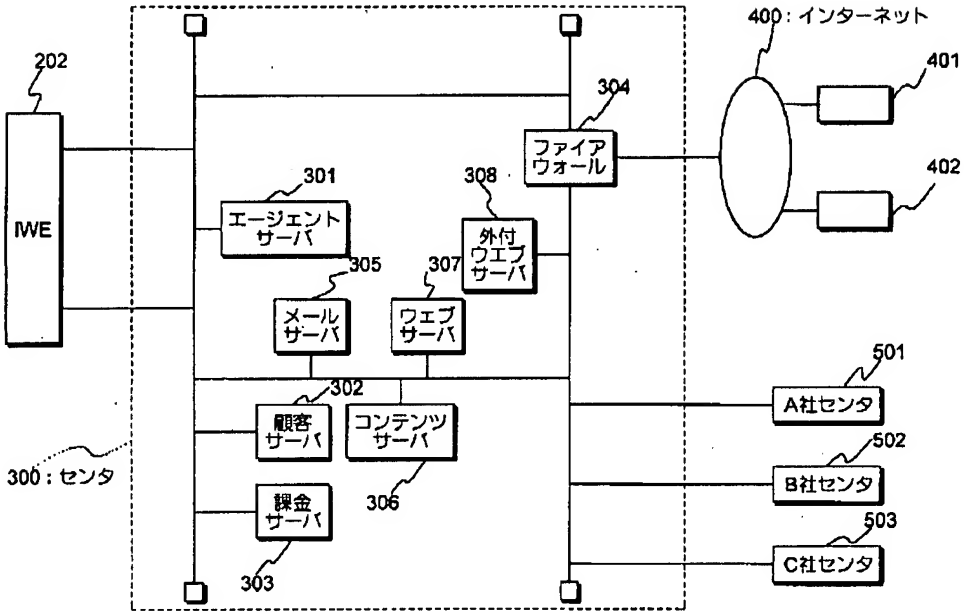
401, 402 .... The Internet top server

501, 502, 503 .... Center of the other company

[Drawing 1]



[Drawing 2]

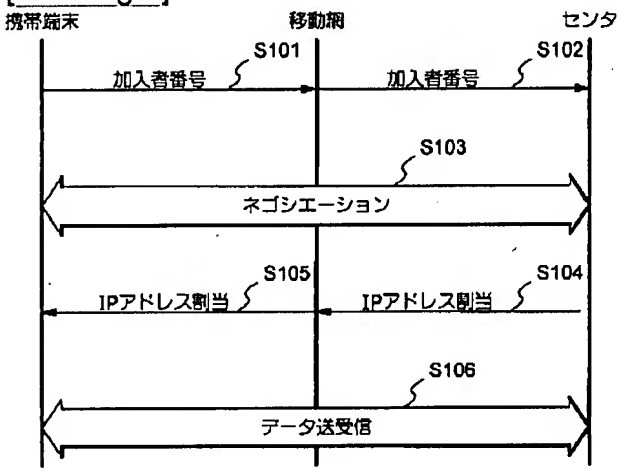


[Drawing 3]

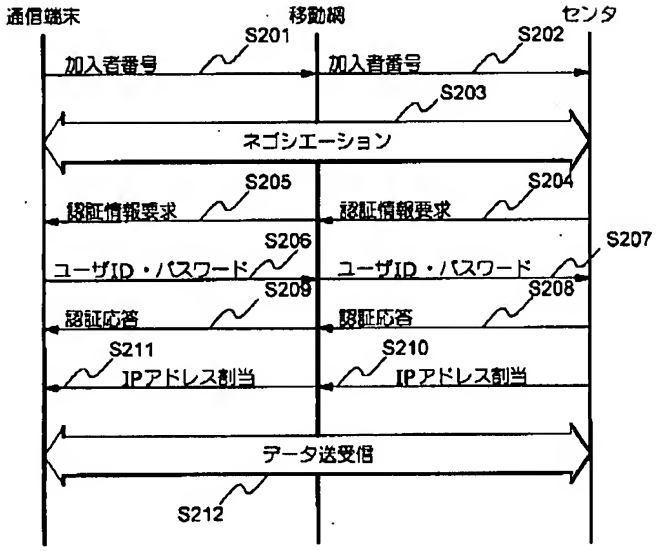
顧客データベース

	加入者番号	認証情報		個人情報			提供情報	機能情報
		ユーザID	パスワード	加入者名	住所	生年月日		
(A)	010-11-12345	1234	ABCD	織田　涼子	東京都中央区…	1970.01.01	占いサービス	V1
(B)	010-22-12345	5678	VXYZ	西村　裕二	千葉県千葉市…	1960.12.31	A社天気予報	V1
(C)	010-33-12345	9876	OPQR	広末　雅彦	東京都大田区…	1980.10.10	http://www.xxx	V2

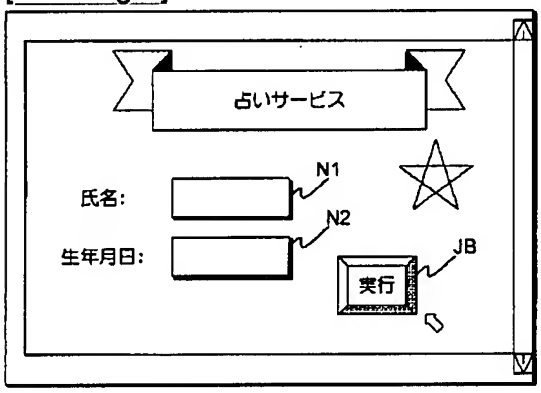
[Drawing 4]



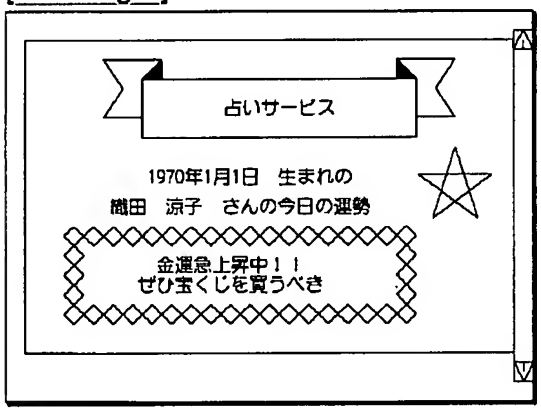
[Drawing 5]



[Drawing 6]



[Drawing 7]



[A Written Amendment]

[Filing Date] Heisei 11(1999) September 22 (1999. 9.22)

[Amendment 1]
[Document to be Amended] Description
[Item(s) to be Amended] Title of invention
[Method of Amendment] Change
[Proposed Amendment]
[Title of the Invention] System to offer information
[Amendment 2]
[Document to be Amended] Description
[Item(s) to be Amended] Claims
[Method of Amendment] Change
[Proposed Amendment]
[Claim(s)]
[Claim 1] It is the system to offer information which transmits data through a communication line to a communication terminal,
A terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned with the connection request from said communication terminal,
The authentication means which attests whether said connection request is recognized based on said terminal specific information which received,
An address grant means to give the Internet protocol address to said attested communication terminal,
Equipment of preparation **** 1,
The 2nd equipment equipped with a customer information storage means to memorize the customer information which is information of the customer who receives information service in said terminal specific information using a correspondence price ****** communication terminal,
The Data Processing Division for offering information to said communication terminal is performed, and it has the 3rd equipment equipped with a data transmitting means to transmit the data in which a processing result is shown to said communication terminal,
Said 1st equipment specifies information required for said Data Processing Division out of said customer information based on said terminal specific information, and is made to transmit it to said 3rd equipment from said 2nd equipment.
Said 3rd equipment is a system to offer information characterized by performing said Data Processing Division based on said received customer information.
[Claim 2] In a system to offer information according to claim 1,
The Data Processing Division for offering information to said communication terminal is the Data Processing Division which should be performed based on the personal information inputted from said communication terminal,

Said 1st equipment is a system to offer information characterized by making said said specified customer information transmit to said 3rd equipment from said 2nd equipment as personal information into which it should be inputted from said communication terminal.
[Claim 3] In a system to offer information according to claim 1,
Said 1st equipment, the 2nd equipment, and the 3rd equipment are systems to offer information characterized by specifying said communication terminal using the Internet protocol address given by said address grant means.
[Amendment 3]
[Document to be Amended] Description
[Item(s) to be Amended] 0001
[Method of Amendment] Change
[Proposed Amendment]
[0001] This invention relates to the system to offer information which offers information through a communication line to a communication terminal.
[Amendment 4]
[Document to be Amended] Description
[Item(s) to be Amended] 0005
[Method of Amendment] Change
[Proposed Amendment]
[0005] It aims at offering the system to offer information which offers information quickly and safely, reducing [this invention is made in order to solve the technical problem mentioned above, and] the operation in a communication terminal.
[Amendment 5]
[Document to be Amended] Description
[Item(s) to be Amended] 0006
[Method of Amendment] Change
[Proposed Amendment]
[0006]
[Means for solving problem] In order to solve the technical problem mentioned above,
[invention according to claim 1] To a communication terminal, through a communication line, are data the system to offer information which transmits, and [connection request / from said communication terminal] A terminal specific information receiving means to receive the terminal specific information which specifies the communication terminal concerned, The authentication means which attests whether said connection request is recognized based on said terminal specific information which received, An address grant means to give the Internet protocol address to said attested communication terminal, The 2nd equipment equipped with the equipment of preparation **** 1, and a customer information storage means to memorize

the customer information which is information of the customer who receives information service in said terminal specific information using a correspondence price ****** communication terminal, Perform the Data Processing Division for offering information to said communication terminal, have the 3rd equipment equipped with a data transmitting means to transmit the data in which a processing result is shown to said communication terminal, and [said 1st equipment] Based on said terminal specific information, specify information required for said Data Processing Division out of said customer information, it is made to transmit to said 3rd equipment from said 2nd equipment, and said 3rd equipment is characterized by performing said Data Processing Division based on said received customer information.

[Amendment 6]

[Document to be Amended] Description

[Item(s) to be Amended] 0007

[Method of Amendment] Change

[Proposed Amendment] [0007] [moreover, Data Processing Division for invention according to claim 2 to offer information to said communication terminal in a system to offer information according to claim 1] It is the Data Processing Division which should be performed based on the personal information inputted from said communication terminal, and said 1st equipment is characterized by making said said specified customer information transmit to said 3rd equipment from said 2nd equipment as personal information into which it should be inputted from said communication terminal. Moreover, it is characterized by invention according to claim 3 specifying said communication terminal in a system to offer information according to claim 1 using the Internet protocol address to which said 1st equipment, the 2nd equipment, and the 3rd equipment were given by said address grant means.

[Amendment 7]

[Document to be Amended] Description

[Item(s) to be Amended] 0019

[Method of Amendment] Change

[Proposed Amendment]

[0019] The customer server 302 is a server which memorized the customer information mentioned later, and transmits customer information to other servers with directions of an agent server. Other servers which received customer information can perform processing for information service based on customer information. More specifically in operation of an embodiment, an example is given and explained.

[Amendment 8]

[Document to be Amended] Description

[Item(s) to be Amended] 0032

[Method of Amendment] Change

[Proposed Amendment]

[0032] The agent server 301 of the center 300 receives beforehand the user authentication information corresponding to the user authentication information which should be received from the communication terminal 100 in Step S206 from the customer server 302 based on the subscriber's number received in Step S202. And it attests by distinguishing whether the user authentication information which the user ID and password which were received in Step S206 read beforehand, and the user authentication information received from the customer server 302 are in agreement. If authentication is completed, a center 300 will transmit an authentication reply (S208), and the move network 200 will transmit an authentication reply to the communication terminal 100 (S209). Then, a center 100 assigns IP dress and transmits (S210). The move network 200 transmits an IP address to the communication terminal 100 (S211). Then, in between the communication terminal 100 and a center 300, data transmission and reception using an IP address is performed (S212).

[Amendment 9]

[Document to be Amended] Description

[Item(s) to be Amended] 0052

[Method of Amendment] Change

[Proposed Amendment]

[0052]

[Effect of the Invention] As explained above, according to this invention, the system to offer information which offers information quickly and safely can be offered, reducing the operation in a communication terminal.

[Translation done.]

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News

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Type: A : Unexamined Patent Publication (Kokai)

Document Number: 2000-92236

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	A, U (Kokai)	H12-123456 or 2000-123456
	B, U, U1, Y (Kokoku)	S46-123456
	A1	WO1998-123456 or WO98-12345(
	B, U, Y	2500001

Select up to 3 technical dictionaries in order of priority.

Dictionary1: Information communication technology (ICT)
Dictionary2: Electronic engineering
Dictionary3: Technical term

Sul

[JP,2000-076336,A] Inventor: Fukuo Taro

Japanese (PDF) | File Wrapper Information

FULL CONTENTS CLAIM + DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION TECHNICAL PROBLEM MEANS DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.]

FULL CONTENTS

[Claim(s)]

[Claim 1] Send and receive the data of Electronic Commerce Technology Division through the Internet between a user terminal and Electronic Commerce Technology Division service provider equipment. In the electronic banking authorization system for Electronic Commerce Technology Division which settles the payment of this Electronic Commerce Technology Division with a credit card settlement system, [this electronic banking authorization system] If the data of Electronic Commerce Technology Division containing a user identifier is received from said Electronic Commerce Technology Division service provider equipment A means to call-back-receive the secrecy information of the user for electronic banking for a user terminal directly through this public network through a public network from a user terminal based on this user identifier, A means to transmit the secrecy information of the this user who received to a credit card settlement system, and to receive the authentication result data about this user's secrecy information from a credit card settlement system, The electronic banking authorization system characterized by having a means to transmit this authentication result data to said Electronic Commerce Technology Division service provider equipment.

[Claim 2] Said electronic banking authorization system sends and receives information through the public network of said user terminal, an ISDN circuit, or an analog telephone line. The electronic banking authorization system according to claim 1 characterized by having the composition which sends and receives information data through said credit card settlement system, the common carrier leased line, or a digital data exchange.

[Claim 3] The subscriber database storage section which memorizes the subscriber information of the user who registered said electronic banking authorization system into this electronic banking authorization system beforehand, and the Electronic Commerce Technology Division service provider, The electronic banking authorization system according to claim 1 or 2 characterized by having the transaction database storage section which

memorizes the order data of Electronic Commerce Technology Division sent and received between a user terminal and Electronic Commerce Technology Division service provider equipment.

[Claim 4] [the subscriber database storage section of said electronic banking authorization system] It has the composition which assigns and memorizes a respectively peculiar user identifier and the Electronic Commerce Technology Division service provider identifier to each user and each Electronic Commerce Technology Division service provider. Said electronic banking authorization system is an electronic banking authorization system given in Claims 1-3 any 1 clause characterized by having the composition which reads the subscriber information of a user or the Electronic Commerce Technology Division service provider from said subscriber database storage section by using those identifiers as a master key.

[Claim 5] [the transaction database storage section of said electronic banking authorization system] Have the composition which assigns and memorizes a transaction identifier respectively peculiar to the order data of each Electronic Commerce Technology Division, and [said electronic banking authorization system] The electronic banking authorization system given in Claims 1-4 any 1 clause characterized by having a means to notify this transaction identifier to said credit card settlement system and said Electronic Commerce Technology Division service provider equipment.

[Claim 6] Said electronic banking authorization system searches this user's telephone number from the subscriber database storage section based on the user identifier transmitted from Electronic Commerce Technology Division service provider equipment. The means which carries out the call-back of the user terminal through a public network by this telephone number, The electronic banking authorization system given in Claims 1-5 any 1 clause characterized by having a means to send out the announcement including the guidance which stimulates transmission of the secrecy information of the user for electronic banking, and the means which carries out reception maintenance of the secrecy information transmitted from the user terminal.

[Claim 7] Said electronic banking authorization system is equipped with a means to recognize whether the circuit to which the user terminal was connected is an ISDN circuit, or it is an analog telephone line based on the data of said subscriber database storage section. [the means which carries out the call-back of said user terminal] [face carrying out the call-back of the user terminal, and] when the circuit of said user terminal is busy when the circuit to which said user terminal was connected is an ISDN circuit The queuing call or call waiting call which waits for and calls a busy end is performed. The electronic banking authorization system according to claim 6 characterized by having the composition which performs the queuing call or call waiting call which waits for and calls the end of the Internet access of said user terminal when the circuit to which said user terminal was connected is an analog telephone line.

[Claim 8] A means to provide a user terminal with the display screen for Electronic Commerce Technology Division through the Internet, and to receive the order data of Electronic Commerce Technology Division with a user identifier from a user terminal, A means to transmit this user identifier and the order data of Electronic Commerce Technology Division to an electronic banking authorization system through the Internet, A means to receive said user identifier and the authentication result information about said Electronic Commerce Technology Division from said electronic banking authorization system, The Electronic Commerce Technology Division service provider equipment characterized by having a means to transmit this authentication result information to said user terminal with the transaction identifier of the order data of said Electronic Commerce Technology Division.

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the electronic banking authorization system and the Electronic Commerce Technology Division service provider equipment in Electronic Commerce Technology Division, such as an online shopping by the Internet.

[0002] The commercial on line service by the Internet spreads in recent years, and the opportunity for the individual secrecy information for electronic banking to be ******(ed) on the Internet is increasing. The individual secrecy information sent and received for electronic banking is protected safely, and the construction of a system which can perform quick and simple electronic banking is demanded as use of Electronic Commerce Technology Division by such a commercial on line service increases.

[0003] In an online shopping, virtual mall shopping, etc. by the Internet, for the user side It is the system by which the secrecy information which secrecy information, including a credit card number etc., was safely transmitted, and was transmitted is not misused by revealing, moreover, for the Electronic Commerce Technology Division service provider side It is important that the user who accessed the Electronic Commerce Technology Division service is him of Shinsei of a commercial transaction, and it is the system by which the corroboration of the price by the credit card number information transmitted by the user that there is no trouble in paying is obtained.

[0004]

[Description of the Prior Art] When using the Electronic Commerce Technology Division service by the Internet, transmission of secrecy information, including a credit card number etc., is required of a user in many cases at the time of the purchase of goods etc. Although the encoding technology and secret communication technology of transmit data are used in

transmission of secrecy information, under the present circumstances, the safety to secrecy information can never say that it is enough only with those technology.

[0005] Because, since the information dispatch in the Internet goes via many and unspecified servers in which a management organization is not necessarily clear, there is a possibility that the surreptitious use improper use of the secrecy information may be carried out. Therefore, the following policies were conventionally taken about the treatment of secrecy information, including a credit card number etc., for example.

[0006] A user beforehand secrecy information, including a credit card number etc., one of them [side / each / Electronic Commerce Technology Division service provider] It is the method of transmitting the order data and the user name of Electronic Commerce Technology Division, and performing Electronic Commerce Technology Division, without transmitting by the Internet and other means of communications, registering, and transmitting secrecy information, including a credit card number etc., at the time of the Electronic Commerce Technology Division service use by the Internet.

[0007] However, by this method, when change is produced in a credit card number etc., you have to transmit and notify that to each registration place Electronic Commerce Technology Division service provider side. Moreover, when merchandise purchase etc. is performed from two or more Electronic Commerce Technology Division service providers, Since secrecy information, including a credit card number etc., must be registered, many parts distribute and secrecy information is kept to each Electronic Commerce Technology Division service provider side, it is not desirable after that the safety to confidentiality manages.

[0008] As other methods, there is the method of transmitting secrecy information, including a credit card number etc., to the Electronic Commerce Technology Division service provider side with a facsimile image at the time of the Electronic Commerce Technology Division service use by the Internet. However, by this method, the document with which the credit card number was written down is outputted to the facsimile apparatus by the side of the Electronic Commerce Technology Division service provider, and if that storage management is unsuitable, since hard copy etc. can be performed easily, a possibility that secrecy information may be used unjustly will arise.

[0009]

[Problem to be solved by the invention] In Electronic Commerce Technology Division, such as online shopping service by the Internet, a user transmits and purchases a credit card number etc. to finish settlement of article money simple. However, it sets in the Electronic Commerce Technology Division service to transmission of the secrecy information which went via the Internet, the measure against secret protection is not thoroughgoing, and according to the Internet. The check work of the Electronic Commerce Technology Division data to trouble generating of the unjust claim by the multiplex claim by the procedure mistake by the side of

the Electronic Commerce Technology Division service provider, other users' malpractice, etc. became complicated.

[0010] Furthermore, when a user uses several different Electronic Commerce Technology Division service providers, It is necessary to register information, including a credit card number etc., for every Electronic Commerce Technology Division service provider conventionally. The Electronic Commerce Technology Division service from the Electronic Commerce Technology Division service provider which unified control of secrecy information cannot be performed and has not registered credit card number information etc. in advance could not be used, but was inconvenience.

[0011] This invention prevents disclosure of secrecy information, including a credit card number etc., in the Electronic Commerce Technology Division service by the Internet. It aims at offering the electronic banking authorization system which can perform Electronic Commerce Technology Division simple and safely, and Electronic Commerce Technology Division service provider equipment, without being able to perform maintenance and a check of the Electronic Commerce Technology Division data, and the user registering secrecy information, including a credit card number etc., beforehand.

[0012]

[Means for solving problem] The electronic banking authorization system of this invention sends and receives the data of Electronic Commerce Technology Division through the Internet between (1) user terminal and Electronic Commerce Technology Division service provider equipment. In the electronic banking authorization system for Electronic Commerce Technology Division which settles the payment of this Electronic Commerce Technology Division with a credit card settlement system, [this electronic banking authorization system] If the data of Electronic Commerce Technology Division containing a user identifier is received from said Electronic Commerce Technology Division service provider equipment A means to call-back-receive the secrecy information of the user for electronic banking for a user terminal directly through this public network through a public network from a user terminal based on this user identifier, A means to transmit the secrecy information of the this user who received to a credit card settlement system, and to receive the authentication result data about this user's secrecy information from a credit card settlement system, It has a means to transmit this authentication result data to said Electronic Commerce Technology Division service provider equipment.

[0013] (2) -- said electronic banking authorization system is equipped with the composition which sends and receives information through the public network of said user terminal, an ISDN circuit, or an analog telephone line, and sends and receives information data through said credit card settlement system, the common carrier leased line, or a digital data exchange. [moreover,]

[0014] (3) -- [moreover, / said electronic banking authorization system / section / which memorizes the subscriber information of the user who registered with this electronic banking authorization system beforehand, and the Electronic Commerce Technology Division service provider / subscriber database storage] It has the transaction database storage section which memorizes the order data of Electronic Commerce Technology Division sent and received between a user terminal and Electronic Commerce Technology Division service provider equipment.
[0015] (4) -- [moreover, / the subscriber database storage section of said electronic banking authorization system] It has the composition which assigns and memorizes a respectively peculiar user identifier and the Electronic Commerce Technology Division service provider identifier to each user and each Electronic Commerce Technology Division service provider. Said electronic banking authorization system has the composition which reads the subscriber information of a user or the Electronic Commerce Technology Division service provider from said subscriber database storage section by using those identifiers as a master key.
[0016] (5) -- [moreover, / the transaction database storage section of said electronic banking authorization system] Have the composition which assigns and memorizes a transaction identifier respectively peculiar to the order data of each Electronic Commerce Technology Division, and [said electronic banking authorization system] It has a means to notify this transaction identifier to said credit card settlement system and said Electronic Commerce Technology Division service provider equipment.
[0017] (6) -- [said electronic banking authorization system / section / subscriber database storage / this user's telephone number / search and] based on the user identifier transmitted from Electronic Commerce Technology Division service provider equipment [moreover,] It has a means to send out the announcement including the means which carries out the call-back of the user through a public network by this telephone number, and the guidance which stimulates transmission of the secrecy information of a user required for electronic banking, and the means which carries out reception maintenance of the secrecy information transmitted from the user terminal.
[0018] (7) -- [moreover, / said electronic banking authorization system / a means to recognize whether the circuit to which the user terminal was connected is an ISDN circuit, or it is an analog telephone line based on the data of said subscriber database storage section / equip with and] [the means which carries out the call-back of said user terminal] [face carrying out the call-back of the user terminal, and] when the circuit of said user terminal is busy when the circuit to which said user terminal was connected is an ISDN circuit The queuing call or call waiting call which waits for and calls a busy end is performed. When the circuit to which said user terminal was connected is an analog telephone line, it has the composition which performs the queuing call or call waiting call which waits for and calls the end of the Internet

access of said user terminal.

[0019] [moreover, the Electronic Commerce Technology Division service provider equipment of this invention] (8) A means to provide a user terminal with the display screen for Electronic Commerce Technology Division through the Internet, and to receive the order data of Electronic Commerce Technology Division with a user identifier from a user terminal, A means to transmit this user identifier and the order data of Electronic Commerce Technology Division to an electronic banking authorization system through the Internet, It has a means to receive said user identifier and the authentication result information about said Electronic Commerce Technology Division from said electronic banking authorization system, and a means to transmit the transaction identifier of the order data of said Electronic Commerce Technology Division for this authentication result information to said user terminal.

[0020]

[Mode for carrying out the invention] Drawing 1 is the explanatory view of the Electronic Commerce Technology Division service system of this invention. In this figure, a user's information-machines-and-equipment terminal and 1-2 1-1 This user's telephone terminal, ISDN or an analog telephone network, and 1-4 1-3 Internet service provider equipment, As for Electronic Commerce Technology Division service provider equipment and 1-7, 1-5 is [the common carrier leased line or a packet switched network, and 1-9] credit card settlement systems an electronic banking authorization system and 1-8 an Internet communication network and 1-6.

[0021] The information-machines-and-equipment terminals 1-1 of user ** are information processors, such as a personal computer, and are connected to ISDN or the analog telephone network 1-3 with this user's telephone terminal 1-2. Here, the information-machines-and-equipment terminal 1-1 and telephone terminal of user ** constitute a user terminal.

[0022] It connects with Internet service provider equipment 1-4 through ISDN or the analog telephone network 1-3, and connects with Electronic Commerce Technology Division service provider equipment 1-6 via Internet communication network 1-5, and a user's information-machines-and-equipment terminal 1-1 transmits the data for Electronic Commerce Technology Division.

[0023] [Electronic Commerce Technology Division service provider equipment 1-6] If the order data for Electronic Commerce Technology Division which offered the web page for Electronic Commerce Technology Division (homepage) on the Internet, and was transmitted by the user is received It connects with the electronic banking authorization system 1-7 via Internet communication network 1-5, and the request demand of the authentication is carried out at the electronic banking authorization system 1-7 for Electronic Commerce Technology Division.

[0024] The electronic banking authorization system 1-7 receives each authentication request

demand from two or more Electronic Commerce Technology Division service provider equipment 1-6. It has the function to perform authentication for electronic banking alone about a user, and functions as an authentication center intensively prepared to two or more Electronic Commerce Technology Division service providers.

[0025] The electronic banking authorization system 1-7 carries out the call-back of a user's telephone terminal 1-2 through ISDN or the analog telephone network 1-3. Secrecy information, including a credit card number etc., is received through ISDN or the analog telephone network 1-3 from a user. Moreover, authentication center equipment 1-7 is connected to the credit card settlement system 1-9 through the common carrier leased line or the packet switched network 1-8. While notifying the credit card number received from the user to the credit card settlement system 1-9, the inquiry about the payment by the credit card number etc. is performed, and it has the function which transmits the result to Electronic Commerce Technology Division service provider equipment 1-6.

[0026] The credit card settlement system 1-9 is installed in a credit card company etc. Based on information, including the credit card number notified from the electronic banking authorization system 1-7, and the amount-of-money information on Electronic Commerce Technology Division, it checks [which is depended on account **** etc.] paying for no trouble, and has the function which transmits the result to the electronic banking authorization system 1-7.

[0027] Thus, although transmission and reception of the data through ISDN or the analog telephone network 1-3, Internet communication network 1-5 and the common carrier leased line, or the packet switched network 1-8 perform electronic banking authentication by this invention Among these, simple Internet communication network 1-5 of operation is used for transmission and reception of the low information on privacy at transmission and reception of the high information on privacy using ISDN or the analog telephone network 1-3 and the common carrier leased line, or the packet switched network 1-8. In addition, the above-mentioned packet switched network may be a digital data exchange.

[0028] Drawing 2 is the figure showing the principal part of the electronic banking authorization system of this invention. The exchange section 2-3 equipped with the subscriber database storage section 2-1 and the announcement machine 2-2 with which the electronic banking authorization system 2-10 holds a user's etc. subscriber information, It consists of the communication terminal sections 2-5 equipped with the transaction database storage section 2-4 in which Electronic Commerce Technology Division carries out order data-hold.

[0029] The exchange section 2-3 carries out the call-back of the user terminal 2-7 through ISDN or the analog telephone network 2-6. an announcement machine 2-2 -- information (a user identifier --) required for the amount billed and electronic banking The guidance which stimulates sending out of a credit card number etc. is sent out by a synthetic voice, and it has

the function to receive information required for electronic banking including the secrecy information, including a credit card number etc., transmitted by the PB signal etc. from the user terminal 2-7.

[0030] Moreover, about the received credit card number, the exchange section 2-3 performs a notice and an inquiry to the credit card settlement system 2-9 through the common carrier leased line or the packet switched network 2-8, and has the function which receives the answer result and is sent out to the communication terminal section 2-5.

[0031] The communication terminal section 2-5 will transmit to the Electronic Commerce Technology Division service provider (CSP) 2-12 through Internet communication network 2-11, if it connects with the exchange section 2-3 and the answer result from the credit card settlement system 2-9 is received from the exchange section 2-3.

[0032] Thus, it connects with ISDN or the analog telephone network 2-6 and the common carrier leased line, or the packet switched network 2-8, and the high information on privacy is sent [the exchange section 2-3] and received through ISDN, the analog telephone network 2-6, the common carrier leased line, or the packet switched network 2-8.

[0033] It connects with Internet communication network 2-11, and the communication terminal section 2-5 sends and receives the low information on privacy through Internet communication network 2-11. What has a safety control enough since Internet communication goes via many and unspecified Internet service providers as this Reason was mentioned above to the confidentiality of communication information is because it is hard to say.

[0034] Since it connects with a direct communication partner's transmitter-receiver, information is sent and received and any third parties other than a communications partner do not intervene, there are few dangers that communication information will flow out, and the communication which, on the other hand, minded only ISDN, the analog telephone network, the packet switched network, or the common carrier leased line which is a public network has the high degree of safe.

[0035] [with therefore, the electronic banking authorization system which installed the authentication center where only / which deals with the communication information as which confidentiality strict observance is required in the Electronic Commerce Technology Division service /, or a small number was restricted, and was furnished to this authentication center] By considering secrecy information as the composition which carries out central control unitary, by having composition which uses a communication network properly according to the privacy of the information sent and received, this electronic banking authorization system can prevent decentralization and tapping of secret information, and can build the reliable system to secret information.

[0036] Drawing 3 is the functional block diagram of the electronic banking authorization system of this invention. As for the data communication section of the exchange section, and 3-13, in

this figure, the exchange section and 3-11 are [the service control section and 3-15] the subscriber database storage sections the I/O section of the exchange section, and 3-14 CPU of this exchange section, and 3-12 3-1.

[0037] 3-2 the communication terminal section and 3-21 CPU of this communication terminal section, and 3-22 Moreover, the data communication section of the communication terminal section, It is the transaction database storage section in which the I/O section of the 3-23 communication-terminal section and 3-24 hold the WWW (Word Wide Web) database storage section, and 3-25 holds order data.

[0038] The data communication section 3-12 of the exchange section carries out the call-back of a user's telephone terminal through ISDN or an analog telephone network. Information, including a credit card number etc., is received and a notice and an inquiry are performed to a credit card settlement system through the common carrier leased line or a packet switched network about information, including the received credit card number. It connects with the I/O section 3-23 of the communication terminal section, and mutual, and the I/O section 3-13 of the exchange section has the data communication between the exchange section 3-1 and the communication terminal section 3-2, and a data conversion feature for it.

[0039] The data communication section 3-22 of the communication terminal section is connected to an Internet communication network. The order data of Electronic Commerce Technology Division by the Internet is received from the Electronic Commerce Technology Division service provider, and the inquiry result information from a credit card settlement system etc. is transmitted to the Electronic Commerce Technology Division service provider.

[0040] The subscriber database storage section 3-15 of the exchange section memorizes as a database the subscriber information about each user who had the registration demand beforehand, the Electronic Commerce Technology Division service provider, and a credit card company. Therefore, although the user who demands Electronic Commerce Technology Division needs to register subscriber information beforehand only to the subscriber database storage section 3-15 of this electronic banking authorization system In order that it may perform the call-back from an electronic banking authorization system proper, it is the minimum information for managing the transaction data of Electronic Commerce Technology Division, and there is no registering-beforehand-secrecy information, including credit card number etc., necessity.

[0041] [the WWW database storage section 3-24 of the communication terminal section] Memorizing [and] the database for the web pages of the Internet, the transaction database storage section 3-25 holds transaction data, such as order data sent and received between the user and the Electronic Commerce Technology Division service provider.

[0042] Drawing 4 is the figure showing the contents of the database storage section of the electronic banking authorization system of this invention. (B of (A) of a figure) of a subscriber

database and a figure is a transaction database between a user and the Electronic Commerce Technology Division service provider.

[0043] The subscriber database of (A) of a figure memorizes the subscriber information in the form of a table for every user, Electronic Commerce Technology Division service provider, and credit card company. About a user, they are memorized by a user identifier (ID), a name, an address, the telephone number, the service state, etc., and [service provider / Electronic Commerce Technology Division] They are memorized by the Electronic Commerce Technology Division service provider identifier (service ID), a company name, an address, the telephone number, the service state, etc., and [credit card company] Subscriber information, such as a credit card company identifier (credit ID), a company name, other addresses that omitted illustration, the telephone number, and a service state, is memorized.

[0044] furthermore, a subscriber database carries out storage maintenance of each user's circuit class and class of service (for example, an ISDN circuit or an analog telephone line -- moreover -- the subscriber's loop in which call waiting (call waiting) service is possible ****** -- etc. -- data).

[0045] [the transaction database of (B) of a figure] A transaction identifier (ID), an authentication result, a credit card company identifier (credit ID), a user identifier (ID), the Electronic Commerce Technology Division service provider identifier (service ID), a brand name, the number, a price, etc. are memorized in the form of a table.

[0046] Drawing 5 or drawing 7 is the explanatory view of the communication procedure of the Electronic Commerce Technology Division service of this invention. As first shown in ** of drawing 5 , a user using the information-machines-and-equipment terminal 5-1 [with Internet access] The order data about purchasing commodities, such as a user ID, a brand name, and the number, is transmitted to the database section of WWW server 5-2 of the Electronic Commerce Technology Division service provider (CSP) through an Internet service provider (ISP).

[0047] Next, as shown in ** of drawing 6 , WWW server 6-1 of the Electronic Commerce Technology Division service provider transmits the data of Service ID, a user ID, a brand name, the number, a price, etc. to the database section of the electronic banking authorization system 6-2 by Internet access.

[0048] [the electronic banking authorization system 6-2 (in drawing 5 , it is 5-3)] The circuit class and class of service are searched from a subscriber database based on a user ID. As shown in ** of drawing 5 , the call-back of a user's telephone terminal 5-4 is carried out by public-network connection, and a user transmits a user ID and a credit card number from the telephone terminal 5-4, as shown in **' of drawing 5 .

[0049] [here] when the user terminal 5-1 and 5-4 are connected by the ISDN circuit Since the user used two circuits independently, connection has been maintained without cutting the

Internet access circuit of the above-mentioned **. It can answer with the telephone terminal 5-4 to the call-back from the electronic banking authorization system 5-3 to another circuit, and subsequent authentication service can be received.

[0050] When the user terminal 5-1 and 5-4 are connected by the analog telephone line, a user once cuts the Internet access of the above-mentioned **, and the electronic banking authorization system 5-3 waits for cutting of this Internet access, and performs the queuing call which calls a user's telephone terminal 5-4.

[0051] Although the user of an analog telephone line answers a queuing call from the electronic banking authorization system 5-3 and transmits a user ID and a credit card number from the telephone terminal 5-4, the E-mail through the Internet will receive subsequent authentication service.

[0052] When [moreover,] the user terminal 5-1 and the circuit to which 5-4 was connected are ISDN circuits and another circuit mentioned above is busy The electronic banking authorization system 5-3 waits for cutting of the circuit of the Internet access of the aforementioned **, or another circuit, and performs the queuing call which carries out the call-back of a user's telephone terminal 5-4.

[0053] When [in addition,] a user is the class of service which can receive a call waiting call (call waiting) It has maintained without the electronic banking authorization system's 5-'s3 having performed the call waiting call instead of the above-mentioned queuing call, and cutting the Internet access circuit of the above-mentioned **. A call-back can be answered from the electronic banking authorization system 5-3, and it can have composition which receives subsequent authentication service.

[0054] Next, as shown in ** of drawing 7 , the electronic banking authorization system 7-1 transmits the data of Transaction ID, a user ID, a credit card number, a brand name, the number, etc. to the credit card settlement system 7-2 through a leased connection or a packet switched network.

[0055] The credit card settlement system 7-2 transmits the data of Service ID, a user ID, an authentication result, etc. to the electronic banking authorization system 7-1 through a leased connection or a packet switched network, as shown in ** of drawing 7 .

[0056] Next, as shown in ** of drawing 6 , the electronic banking authorization system 6-2 transmits the data of Transaction ID, a user ID, an authentication result, credit card company ID, etc. to WWW server 6-1 of the Electronic Commerce Technology Division service provider through Internet access. In addition, you may make it the electronic banking authorization system 6-2 (for it to be 5-3 in drawing 5) announce an authentication result with voice through a public network to a user's telephone terminal 5-4 simultaneously with this, as shown in **' of drawing 5 .

[0057] As finally shown in ** of drawing 5 , the detailed information and receipt of order data of

Electronic Commerce Technology Division are published with Transaction ID through the Internet from WWW server 5-2 of the Electronic Commerce Technology Division service provider. Therefore, the user can check the detailed contents which include the authentication result of Electronic Commerce Technology Division on the screen of a World Wide Web browser immediately.

[0058] Next, the electronic banking authorization system of this invention and the flow of Electronic Commerce Technology Division service provider equipment of operation are explained with drawing 8 and drawing 9 . Drawing 8 is the flow chart of operation of the Electronic Commerce Technology Division service provider equipment of this invention. Moreover, drawing 9 is the flow chart of operation of the electronic banking authorization system of this invention.

[0059] In Step 8-1 which shows drawing 8 Electronic Commerce Technology Division service provider equipment When it comes to the start state of the Electronic Commerce Technology Division service of the Internet, it sets to Step 8-2. A merchandise purchase support screen is displayed by a Web server, and in Step 8-3, if the basic information input of Electronic Commerce Technology Division, such as a user ID from a user, the telephone number, and a brand name of choice, is inputted into waiting and this basic information, in Step 8-4, basic information will be transmitted to an electronic banking authorization system.

[0060] [an electronic banking authorization system] if basic information is received in Step 9-1 shown in drawing 9 It is investigated whether in Step 9-2, this user ID exists in the subscriber database storage section. If it exists, the telephone number of this user ID will be searched in Step 9-3, in Step 9-4, this user's circuit investigates an ISDN circuit or an analog telephone line, and if it is an ISDN circuit, in Step 9-5, a call-back will be carried out by the registration telephone number.

[0061] Moreover, if a user's circuit is an analog telephone line, the queuing call or call waiting (call waiting) call which waits for and calls a busy end in Step 9-6 will be performed. On the other hand, when a call-back is carried out in the above-mentioned step 9-5 to the user of an ISDN circuit and it is during the conversation (busy), the queuing call or call waiting (call waiting) call which waits for and calls a busy end similarly in Step 9-6 is performed.

[0062] If a user's response to a call-back is detected in Step 9-7, guidance with voice will be announced in Step 9-8, and it will wait for the input of secrecy information, including a credit card number etc., in Step 9-9. If secrecy information, including a credit card number etc., is inputted, in Step 9-10, secrecy information and Transaction ID, such as a credit card number, will be transmitted to a credit card settlement system (credit company), and the authentication result will be received from a credit card settlement system.

[0063] If an authentication result is received from a credit card settlement system, in Step 9-11, Transaction ID and the authentication result of a credit card number will be transmitted to

Electronic Commerce Technology Division service provider equipment. In addition, when a user ID does not exist in the above-mentioned step 9-2, the message which refuses the contents of a receptionist in Step 9-12 is generated, and the message is transmitted to Electronic Commerce Technology Division service provider equipment by Step 9-11.
[0064] If Electronic Commerce Technology Division service provider equipment receives an authentication result from an electronic banking authorization system The normality of an authentication result is judged in Step 8-5 shown in drawing 8 , and if normal, the screen display of ending [which shows an authentication result to a user terminal in Step 8-6] with credit card authentication, and receipt issue, and the screen of Transaction ID will be displayed, and it will end.
[0065] Moreover, when an authentication result is abnormal in the judgment of the above-mentioned step 8-5, in Step 8-7, the screen for which credit card authentication is improper is displayed, and it returns to the above-mentioned start step 8-1 in Step 8-8.
[0066] Drawing 10 is the sequence chart of signal transmission and reception of the Electronic Commerce Technology Division service of this invention. In this figure, an Internet service provider and CSP of the subscriber exchange in which LS has accommodated the user, and ISP are Electronic Commerce Technology Division service providers.
[0067] The ISDN circuit or analog telephone line which is a public network connects through the subscriber exchange (LS) between a user and an Internet service provider (ISP) and between the authentication center and user having an electronic banking authorization system.

[0068] The Internet connects between an Internet service provider (ISP) and the Electronic Commerce Technology Division service provider (CSP), and the common carrier leased line or a packet switched network connects between an authentication center and the credit card company equipped with the credit card settlement system.
[0069] A user emits the call to an Internet service provider (ISP) at the subscriber exchange (LS) (10-1). A user and an Internet service provider (ISP) are connected (10-2), and a user and the Electronic Commerce Technology Division service provider (CSP) are connected via this user and an Internet service provider (ISP) (10-3).
[0070] A user transmits transaction information, such as a user ID and a brand name, to the Electronic Commerce Technology Division service provider (CSP) (10-4), and the Electronic Commerce Technology Division service provider (CSP) transmits those information to an authentication center (10-5).
[0071] An authentication center investigates a user's telephone number (TEL#) with a database from a user ID (10-6), and transmits Transaction ID to the Electronic Commerce Technology Division service provider (CSP) (10-7).
[0072] In order that this transaction ID may be transmitted to a user (10-8) and an

authentication center may carry out the call-back of this user to the subscriber exchange (LS), call origination of the Electronic Commerce Technology Division service provider (CSP) is carried out (10-9).

[0073] It connects through a public network between an authentication center and a user (10-10). Sending out an announcement so that an authentication center may input secrecy information, including credit card information etc., (10-11) a user inputs secrecy information, including Transaction ID, a user ID, credit card information, etc., with a telephone terminal (10-12).

[0074] An authentication center registers into a database temporarily the secrecy information inputted by the telephone terminal (10-13), and cuts connection through the public network between users (10-14). An authentication center transmits and asks a credit card company secrecy information, including the credit card information further inputted by the telephone terminal, (10-15), and a credit card company transmits authentication results, such as this credit card information, to an authentication center (10-16).

[0075] An authentication center transmits this authentication result to the Electronic Commerce Technology Division service provider (CSP) (10-17). The Electronic Commerce Technology Division service provider (CSP) transmits an attested [credit card] check certificate and a receipt with Transaction ID based on this authentication result (10-18). A user logs out in response to it, and demands cutting of connection with an Internet service provider (ISP) (10-19).

[0076] The subscriber exchange (LS) cuts the connection which minded the public network by the disconnect request from a user (10-20). The Electronic Commerce Technology Division service provider (CSP) will ask a credit card company for the article money by this Electronic Commerce Technology Division, and a credit card company will ask a user for the price.

[0077]

[Effect of the Invention] As explained above, according to this invention, secrecy information, including a credit card number etc., is directly transmitted only to an electronic banking authorization system through a public network from a user. [this electronic banking authorization system] by carrying out [direct question of 1 yuan in all] central control of the secrecy information, including this credit card number etc., to a credit card settlement system-like by the common carrier leased line etc. Secrecy information, including credit card information etc., is not sent and received on the Internet. Since it is not necessary to raise the safety on the management to the outflow of secrecy information etc. and and the user does not need to register credit card information etc. into each Electronic Commerce Technology Division service provider beforehand, There is an advantage which can use the Electronic Commerce Technology Division service, such as an online shopping, immediately by simple operation.

[0078] Furthermore, in order that an electronic banking authorization system may perform his identification by calling back the Electronic Commerce Technology Division service user based on the subscriber information memorized by the database storage section, the Electronic Commerce Technology Division service provider side and the user side -- him -- necessity of the special authentication equipment for identification cannot be carried out, but simple composition can perform his identification, and trouble generating of an unjust claim of the charge by a user's malpractice etc. can be prevented.
[0079] Since the effectiveness of a user's credit card is notified from an electronic banking authorization system, Electronic Commerce Technology Division service provider equipment does not need to perform maintenance of a user's credit card information, and management, and can constitute a system simply.
[0080] [the transaction data about Electronic Commerce Technology Division exchanged between the user and the Electronic Commerce Technology Division service provider] by attaching and managing an identifier in an electronic banking authorization system A series of communication data of ****** of electronic commerce data and secrecy information can be managed unitary in this electronic banking authorization system, the check work at the time of generating of troubles, such as a wrong request, can become easy, and the Electronic Commerce Technology Division service reliability can be raised.

[Brief Description of the Drawings]
[Drawing 1] It is the explanatory view of the Electronic Commerce Technology Division service system of this invention.
[Drawing 2] It is the figure showing the principal part of the electronic banking authorization system of this invention.
[Drawing 3] It is the functional block diagram of the electronic banking authorization system of this invention.
[Drawing 4] It is the figure showing the contents of the database storage section of the electronic banking authorization system of this invention.
[Drawing 5] It is the explanatory view of the communication procedure of the Electronic Commerce Technology Division service of this invention.
[Drawing 6] It is the explanatory view of the communication procedure of the Electronic Commerce Technology Division service of this invention.
[Drawing 7] It is the explanatory view of the communication procedure of the Electronic Commerce Technology Division service of this invention.
[Drawing 8] It is the flow chart of operation of the Electronic Commerce Technology Division

service provider equipment of this invention.

[Drawing 9] It is the flow chart of operation of the electronic banking authorization system of this invention.

[Drawing 10] It is the sequence chart of signal transmission and reception of the Electronic Commerce Technology Division service of this invention.

[Explanations of letters or numerals]

1-1 User's Information-Machines-and-Equipment Terminal

1-2 This User's Telephone Terminal

1-3 ISDN or Analog Telephone Network

1-4 Internet Service Provider Equipment

1-5 Internet Communication Network

1-6 Electronic Commerce Technology Division Service Provider Equipment

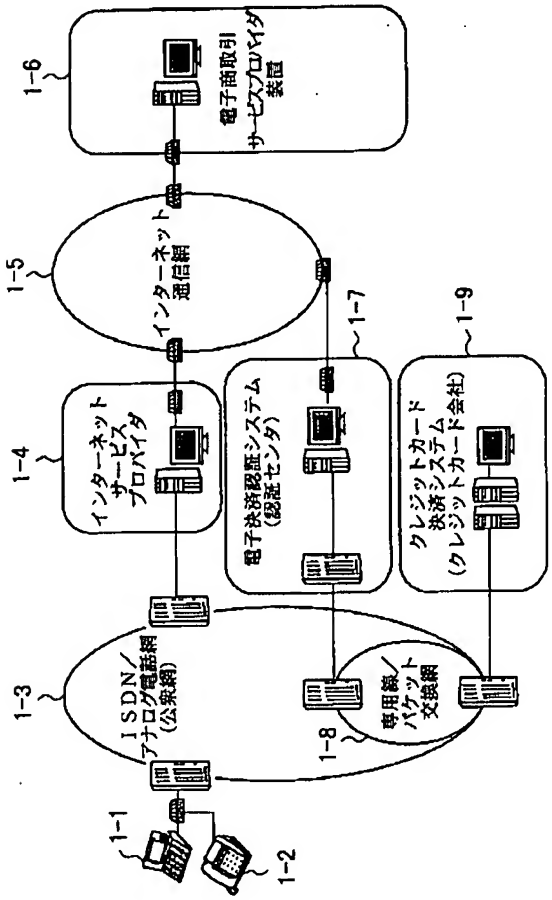
1-7 Electronic Banking Authorization System

1-8 Common Carrier Leased Line or Packet Switched Network

1-9 Credit Card Settlement System

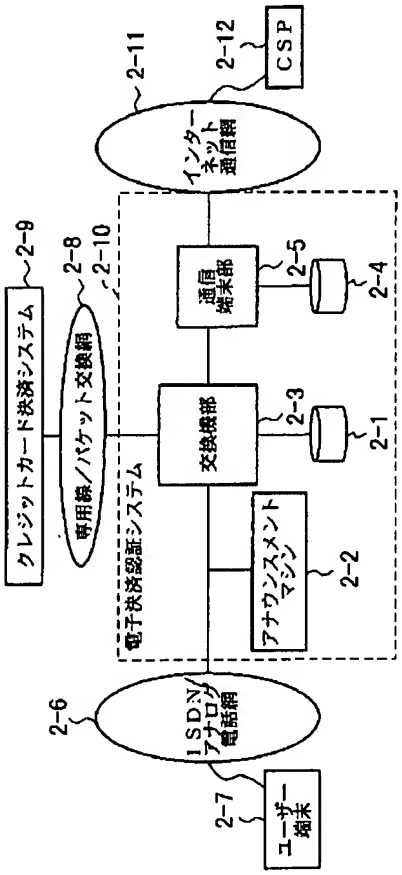
[Drawing 1]

本発明の電子商取引サービスシステムの説明図



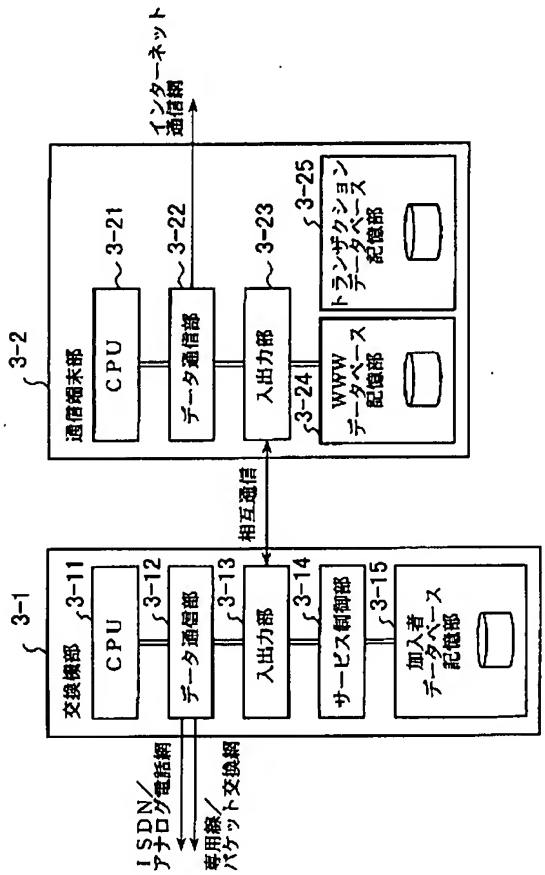
[Drawing 2]

本発明の電子決済認証システムの主要部を示す図



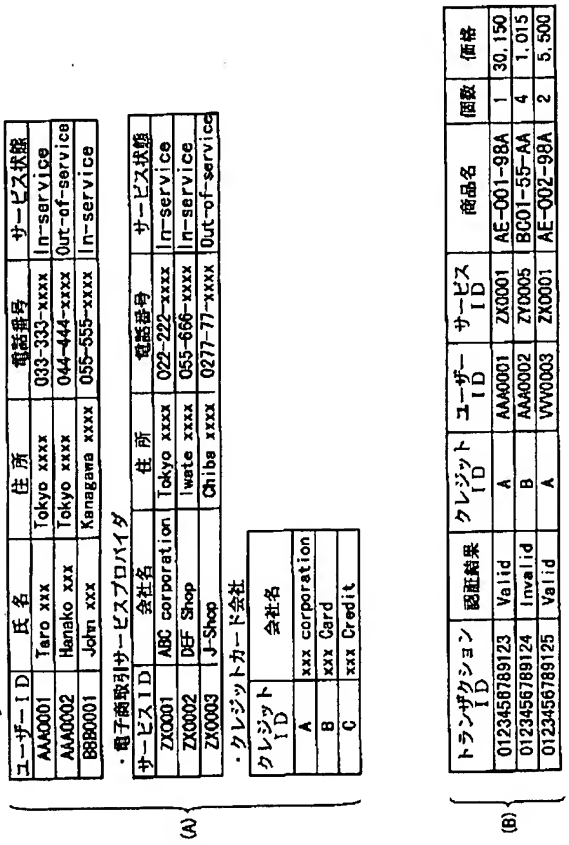
[Drawing 3]

本発明の電子決済認証システムの機能ブロック図



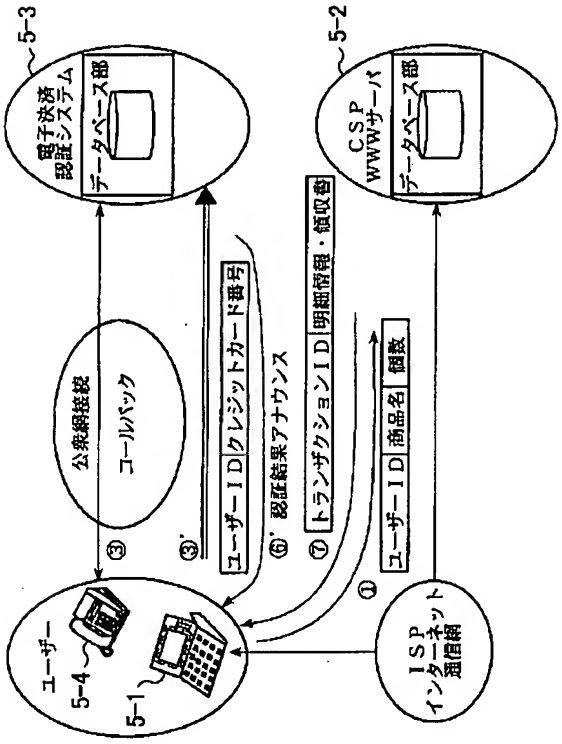
[Drawing 4]

本発明の電子決済認証システムのデータベース記憶部の内容を示す図



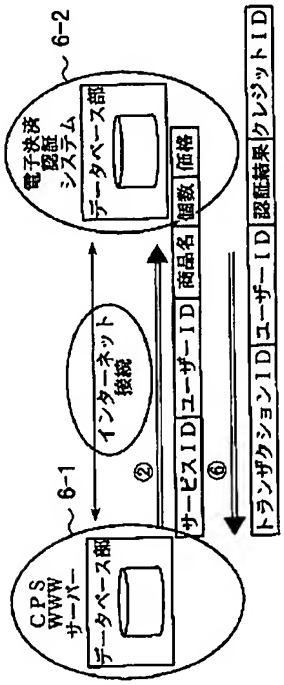
[Drawing 5]

本発明の電子商取引サービスの通信手順の説明図



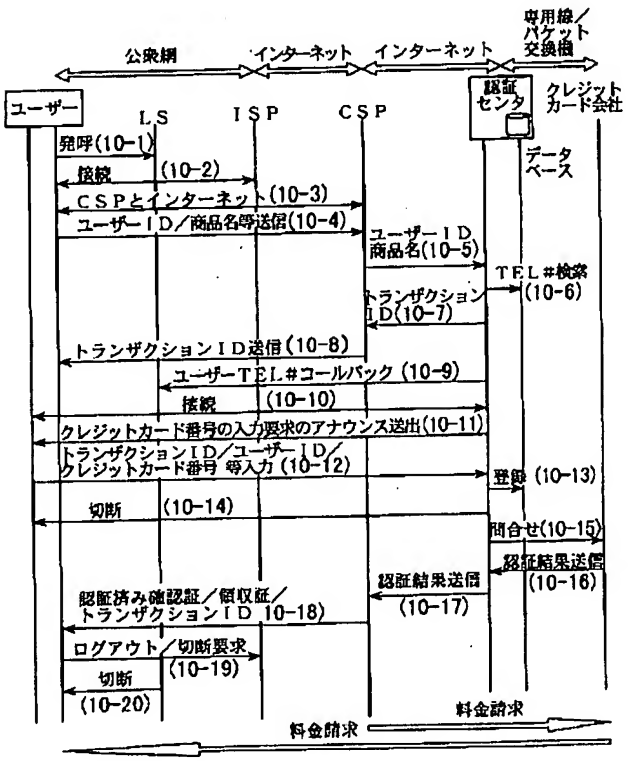
[Drawing 6]

本発明の電子商取引サービスの通信手順の説明図



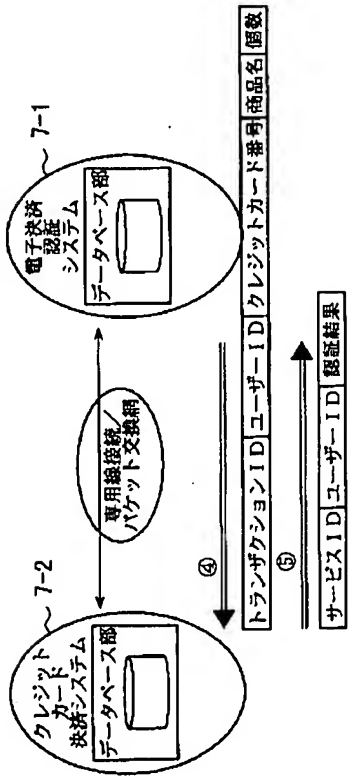
[Drawing 10]

本発明の電子取引サービスの信号受信のシーケンスチャート



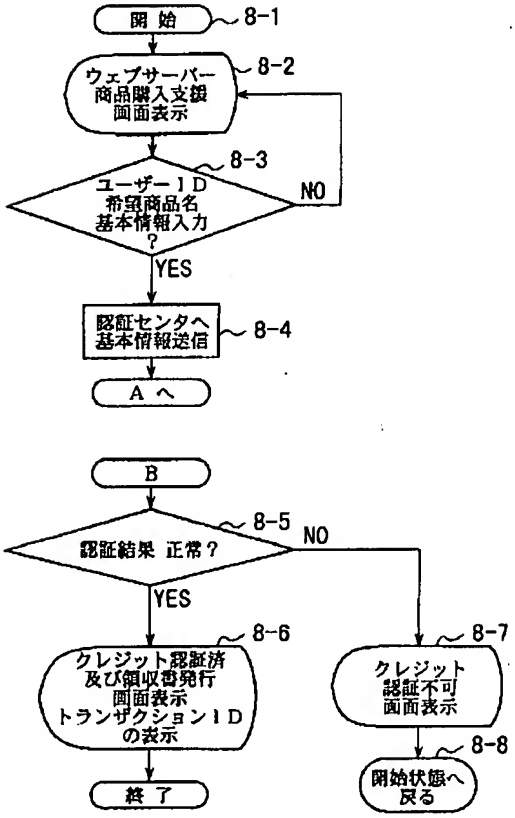
[Drawing 7]

本発明の電子商取引サービスの通信手順の説明図



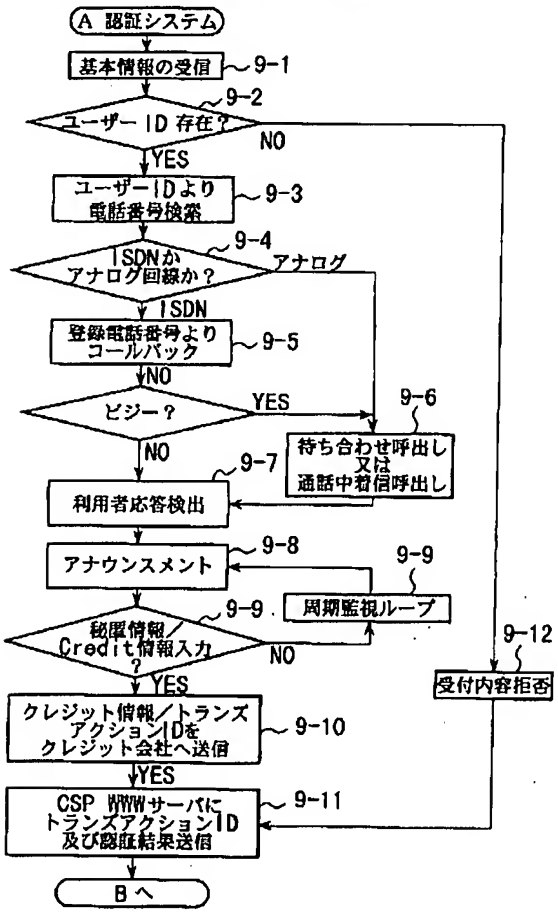
[Drawing 8]

本発明の電子商取引サービスプロバイダ装置の動作のフローチャート



[Drawing 9]

本発明の電子決済認証システムの動作のフローチャート



[Translation done.]

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	A1	WO1998-123456 or WO98-12345(
	B, U, Y	2500001

Select up to 3 technical dictionaries in order of priority.

Dictionary1: Information communication technology (ICT)
Dictionary2: Information communication technology (ICT)
Dictionary3: Technical term

Sul

Inventor Watanabe Shunichi

[JP,06-215009,A(1994)]

Japanese (PDF) | File Wrapper Information

FULL CONTENTS CLAIM + DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION TECHNICAL PROBLEM MEANS OPERATION EXAMPLE DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.]

Notes:
1. Untranslatable words are replaced with asterisks (****).
2. Texts in the figures are not translated and shown as it is.

Translated: 22:12:50 JST 06/28/2007
Dictionary: Last updated 05/18/2007 / Priority: 1. Electronic engineering / 2. Information communication technology (ICT) / 3. Technical term

FULL CONTENTS

[Claim(s)]

[Claim 1] In the card processing system which connected to each card issuer the controller to which a single or multiple card processing terminal is connected through the network A limit memory means to memorize the purchase limit for every card issuer in a card processing terminal or a controller, The 1st amount-of-money memory means for purchase which memorizes cumulatively the amount of money for purchase in a unit period for every card number of each card issuer., The card processing system characterized by establishing the 1st [the memory content of a limit memory means / memory content / of the 1st amount-of-money memory means for purchase] amount-of-money comparison means, and an excess state transmitting means to transmit that to a card issuer when the amount of money for purchase exceeds a purchase limit in the comparison of the 1st amount-of-money comparison means.

[Claim 2] In the card processing system which connected to each card issuer the controller to which a single or multiple card processing terminal is connected through the network The 2nd amount-of-money memory means for purchase which memorizes cumulatively the amount of money for purchase in a unit period on the card processed in a card processing terminal is established. The amount-of-money for purchase write-in means which writes in the amount of money for purchase to the 2nd amount-of-money memory means for purchase in a card processing terminal at the time of termination of processing of transactions, The amount-of-money read-out means for purchase which reads a memory content from the 2nd amount-of-money memory means for purchase at the time of the start of processing of transactions, A limit memory means to memorize the purchase limit for every card issuer in ******, a card processing terminal, or a controller, The 2nd [the memory content of a limit memory means / amount of money / for purchase / which the amount-of-money read-out means for purchase read] amount-of-money comparison means, The card processing system characterized by establishing an excess state transmitting means to transmit that to a card issuer when the

amount of money for purchase exceeds a purchase limit in the comparison of the 2nd amount-of-money comparison means.

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the card processing system which processes a credit card with a credit card processing terminal (it is called Following CAT.).

[0002]

[Description of the Prior Art] Generally processing of transactions by the credit card in a store is performed through CAT. This CAT is connected to the controller installed in the store, and the controller is connected to each card issuer through credit reference networks, such as external CAFIS. When the processing of transactions by a credit card occurs in CAT contained in such a card processing system, [a controller] As compared with the fixed amount of money (ROARI mitt frame) beforehand set up in the amount of money for dealings, when the amount of money for dealings exceeds a ROARI mitt frame, the card data of the credit card which the customer presented is transmitted to the card issuer who published the card through the network. Each card issuer's host computer performs authenticating processing which judges the propriety of the card data transmitted from the controller, and transmits this result to a controller through a network. A controller outputs the data which directs the propriety of processing of transactions to CAT according to the attestation result transmitted by each card issuer.

[0003] On the other hand, when the amount of money for dealings is below a ROARI mitt frame, a controller confirms whether the card data read from the credit card which the customer showed to NEGAFAIRU which memorized poor card data for every card issuer exists. This NEGAFAIRU is periodically updated by NEGADETA transmitted by each card issuer. It is based on whether card data exists in this NEGAFAIRU, and a controller outputs the data which forbids or permits processing of transactions to CAT. Comparatively, at the time of the processing of transactions of a small amount, the simple check by such NEGAFAIRU is performed in order to omit transmission and reception of the data between card issuers and to shorten the time required of processing of transactions.

[0004]

[Problem to be solved by the invention] however, [the conventional card processing system] When the amount of money for dealings is below a ROARI mitt frame and the authenticating processing in a card issuer is omitted It is [that the check by NEGAFAIRU is only performed for every processing of transactions, and]. Even when processing of transactions below a

ROARI mitt frame was performed on a multiple-times continuation target and it had exceeded the amount of a trading limit, this could not be detected but there was a problem which cannot prevent what is called unjust dealings buy it and according to the surroundings.
[0005] The purpose of this invention memorizes cumulatively the amount of money for purchase in a unit period for every card number of each card issuer. When the amount of money for purchase memorized about the credit card shown at the time of processing of transactions exceeds the purchase limit set up beforehand, it is in offering the card processing system which can prevent that buy it and unjust dealings of the large sums by the surroundings are performed by transmitting that to a card issuer.
[0006] Moreover, the amount of money for purchase in a unit period is cumulatively memorized in a card. By transmitting that to a card issuer as compared with the purchase limit which reads the amount of money for purchase memorized by the card at the time of processing of transactions, and is set up beforehand, when the amount of money for purchase exceeds a purchase limit It is in offering the inaccurate card processing system which is performed in a different controller and which can buy it and can also prevent the surroundings certainly.
[0007]
[Means for solving problem] In the card processing system which connected to each card issuer the controller to which a card processing terminal single [the card processing system indicated to Claim 1] or multiple is connected through the network A limit memory means to memorize the purchase limit for every card issuer in said card processing terminal or a controller, The 1st amount-of-money memory means for purchase which memorizes cumulatively the amount of money for purchase in a unit period for every card number of each card issuer, It is characterized by establishing the 1st [the memory content of a limit memory means / memory content / of the 1st amount-of-money memory means for purchase] amount-of-money comparison means, and an excess state transmitting means to transmit that to a card issuer when the amount of money for purchase exceeds a purchase limit in the comparison of the 1st amount-of-money comparison means.
[0008] In the card processing system which connected to each card issuer the controller to which a card processing terminal single [the card processing system indicated to Claim 2] or multiple is connected through the network The 2nd amount-of-money memory means for purchase which memorizes cumulatively the amount of money for purchase in a unit period on the card processed in a card processing terminal is established. The amount-of-money for purchase write-in means which writes in the amount of money for purchase to the 2nd amount-of-money memory means for purchase in a card processing terminal at the time of termination of processing of transactions, The amount-of-money read-out means for purchase which reads a memory content from the 2nd amount-of-money memory means for purchase at the time of the start of processing of transactions, A limit memory means to memorize the purchase limit

for every card issuer in ******, a card processing terminal, or a controller, It is characterized by establishing the 2nd [the memory content of a limit memory means / amount of money / for purchase / which the amount-of-money read-out means for purchase read] amount-of-money comparison means, and an excess state transmitting means to transmit that to a card issuer when the amount of money for purchase exceeds a purchase limit in the comparison of the 2nd amount-of-money comparison means.

[0009]

[Function] In invention indicated to Claim 1, the amount of money for purchase in the unit period for every card is cumulatively memorized in a card processing terminal or a controller, and at the time of processing of transactions, when exceeding the purchase limit to which this amount of money for purchase was set for every card issuer, a notice to that effect is transmitted to a card issuer. Therefore, also when processing of transactions below the ROARI mitt frame which performs the propriety judging of processing of transactions within a controller is performed by the multiple-times continuation target, the busy condition can be discovered in the stage having exceeded the purchase limit, he can buy it and the unjust processing of transactions of the large sum by the surroundings can be prevented certainly.

[0010] Since accumulation of the amount of money for purchase in the unit period for every card is memorized in the card in invention indicated to Claim 2, Even if it is the case where bought it in two or more CAT connected to a different controller, and the surroundings are performed, when the amount of money for accumulation exceeds a purchase limit, the unjust busy condition of a credit card is detected.

[0011]

[Working example] Drawing 1 is the figure showing the composition of the card processing system which is the working example of this invention.

[0012] The card processing system 12 connects CAT1 prepared for every counter to the controller 2 installed in the store 13, connects this controller 2 to each card issuer 4 through the credit reference network 3, and is constituted.

[0013] Drawing 2 is the figure showing the composition of the controller which constitutes the above-mentioned card processing system. a controller 2 -- the main process section 6 -- the low rank communications department 5 and NEGAFAIRU 7 -- he buys it and it has the surroundings check file 8 and the high order communications department 9. The low rank communications department 5 performs ****** of data between CAT1. The main process section 6 processes the data outputted and inputted according to the processing program memorized by the memory outside a figure. NEGAFAIRU 7 memorizes in updating the poor card data periodically transmitted from each card issuer 4. He buys it and the surroundings check file 8 memorizes the amount of money for dealings cumulatively for every card used in the store 13. The high order communications department 9 performs ****** of data among each

card issuer 4 through the credit reference network 3.

[0014] Drawing 3 is a figure with which the above-mentioned controller is equipped, which buying and in which showing the composition of a surroundings check file. It is bought, and the surroundings check file 8 is divided for every usable card issuer at a store 12, and is divided into each memory section 10 and 11 which buys it further and memorizes a surroundings limit and the amount of money for the sales total for that day. it is the limit memory means of this invention -- he bought it and it was beforehand set to the surroundings limit memory section 10 for every card issuer -- he buys it and a surroundings limit is memorized. The amount of money for dealings is cumulatively memorized for every membership number by the amount-of-money memory section 11 for the selling-separately raising total on a certain day with the 1st amount-of-money memory means for purchase of this invention. The contents of this amount-of-money memory section 11 for the total are cleared whenever the business hours on the first are completed.

[0015] Drawing 4 is a flow chart which shows the procedure of the above-mentioned controller. It is standing by (n1) and processing of transactions generates transmission of the data transfer from CAT1 in CAT1, and a controller 2 compares the amount of money for dealings contained in the data transfer with the ROARI mitt frame which was able to be defined beforehand, if the data transfer transmitted from CAT1 is received (n2). When the amount of money for dealings exceeds a ROARI mitt frame, the card data contained in data transfer is transmitted to each card issuer's host computer (n21), and the authenticating processing by each card issuer 4 is chosen. Transmission of the response of the attestation O.K. as which card data expresses a proper purport from the card issuer 4 will transmit the response to which processing of transactions is permitted to CAT1 (n22, n23). Then, in response to the termination data of dealings from CAT1, data transfer is transmitted to each card issuer's 4 host computer (n24). When the response which expresses that it is a poor card from each card issuer 4 is transmitted, the response which stops processing of transactions to CAT1 is transmitted (n22->n25).

[0016] When the amount of money for dealings contained in data transfer is below a ROARI mitt frame, card data is searched in NEGAFAIRU 7 (n3). When card data does not exist in NEGAFAIRU 7, it judges that it is a proper card and card data is searched in the check file 8 (n4, n5). When the amount-of-money data for the total of the card data exists in the check file 8, by this amount of money for dealings, he updates the amount of money for the total (n6, n7), and buys the amount of money for the total after updating, and it compares with a surroundings limit (n8). This processing of n8 is equivalent to the 1st amount-of-money comparison means of this invention. The response which the amount of money for the total after updating buys, and it permits processing of transactions to CAT1 in being below a surroundings limit is transmitted (n8->n9), and data transfer is memorized in the memory

outside a figure in response to the termination data of dealings from CAT1 (n10).
[0017] On the other hand, in the amount of money for the total after updating buying it and exceeding a surroundings limit, the card data concerning the processing of transactions is transmitted to a host (n8->n11), and it performs authenticating processing in each card issuer 4. Processing of these n8 ->n11 is equivalent to the excess state transmitting means of this invention, and the processing of transactions below a ROARI mitt frame with the same card on the same day A multiple-times line crack, Even when the amount of money for the total exceeds a fixed limit, and the amount of money for dealings in this processing of transactions is below a ROARI mitt frame, the authenticating processing by each card issuer 4 is chosen. this twists, for example to a multiple loanee -- he can buy it and the surroundings and inaccurate cards, such as a theft, can be discovered at an early stage.
[0018] In addition, in n4, card data exists in NEGAFAIRU 7, and when the credit card concerning the processing of transactions concerned is a poor card, the response which forbids processing of transactions to CAT1 is transmitted (n4->n12).
[0019] Drawing 5 is the figure showing the composition of the controller which constitutes the card processing system concerning the working example of invention indicated to Claim 2. A controller 22 equips the main process section 26 with the low rank communications department 25, NEGAFAIRU 27, and the high order communications department 28 like what is applied to the conventional card processing system, and is constituted. This low rank communications department 25, the main process section 26, NEGAFAIRU 27, and the high order communications department 28 have the same function as the low rank communications department 5 in the composition shown in drawing 2 , the main process section 6, NEGAFAIRU 7, and the high order communications department 9.
[0020] Drawing 6 is the block diagram of the control section of CAT which constitutes the above-mentioned card processing system. Through interfaces 35-38, the control section of CAT1 connects a card reader / writer 39, a display 40, a printer 41, and a keyboard 42, and is constituted while equipping CPU31 [equipped with ROM32 and RAM33] with the check file 34. CPU31 carry out generalization control of each input/output equipment according to the program beforehand written in ROM32, and memorize the data outputted and inputted in the meantime to the predetermined memory area of RAM33. It was beforehand set to the check file 34 for every card issuer, he buys it, and the surroundings limit is memorized. A card reader / writer 39 writes in predetermined data transfer while reading card data in the credit card which the customer presented. A display 40 displays the result of a propriety judging of processing of transactions etc. A print 41 publishes the receipt in which the contents of dealings are shown. A keyboard 42 receives alter operation, such as the amount of money for dealings by a salesclerk.
[0021] Drawing 7 is the figure showing the memory content of the credit card applied in the

above-mentioned card processing system. [the credit card applied in this card processing system] It is the rewrite card which can write in data, and like the usual credit card, while having the storage area of a card issuer's card data, a membership number, and a personal identification number, it has the storage area of the amount of money for the total which is the 2nd amount-of-money memory means for purchase of this invention. This amount of money for the total is written in by CAT1 in updating at the time of termination of processing of transactions.

[0022] Drawing 8 is a flow chart which shows the procedure of the control section of Above CAT. CPU31 of CAT1 will read card data, if the insertion of a credit card to a card reader / writer 39 is stood by (n31) and a credit card is inserted in a card reader / writer 39 (n32). Subsequently, data processing which updates the amount of money for the total which stands by (n33) and is contained in card data in the inputted amount of money for dealings in the input of the amount of money for dealings by operation of a keyboard 42 is performed (n34). That is, the amount of money for dealings inputted into the amount of money for the total shown in drawing 7 this time is added. Then, the issue card issuer contained in card data buys it, and a surroundings limit is read from the check file 34 (n35), and is compared with the updated amount of money for the total.

[0023] When [which he buys it and is more than a surroundings limit] the updated amount of money for the total is set up in the card issuer, limit exaggerated information is added to data transfer, and it transmits to a controller 2 (n36, n37). The data transfer which the updated amount of money for the total buys it, and consists of card data and the amount of money for dealings in being under a surroundings limit is transmitted to a controller 22. Then, the response from a controller 22 is stood by and the propriety of processing of transactions is displayed on a display 42 according to the contents of that response (n38-n40). When processing of transactions is permitted, processing of transactions is performed (n41), and the amount of money for the total updated to the credit card inserted in a card reader / writer 39 is written in (n42).

[0024] In addition, the data in which a trade date is shown is contained in the amount of money for the total memorized by the credit card, and judgment whether this trade date is today is included in the operation of the amount of money for the total in the above n34. When a trade date is not in this judgment today, this amount of money for dealings is made into the amount of money for the total as it is, and only when the trade date memorized by the card is today, this amount of money for dealings is added to the read amount of money for the total.

[0025] Drawing 9 is a flow chart which shows the procedure of the controller which constitutes the above-mentioned card processing system. A controller 22 will judge whether limit exaggerated information is included in this data transfer, if data transfer is transmitted from CAT1 (n51, n52). When limit exaggerated information is not included, it is distinguished

whether the amount of money for dealings contained in data transfer is below a ROARI mitt frame (n53). When limit exaggerated information is included in data transfer, or when the amount of money for dealings exceeds a ROARI mitt frame, data transfer is transmitted to a card issuer and authenticating processing with a host computer is performed (n55). Limit exaggerated information is not included in data transfer, but when the amount of money for dealings is moreover below a ROARI mitt frame, NEGACHIEKKU processing which searches card data in NEGAFAIRU 27 is performed (n54). It is based on the decision result of whether the card in the above-mentioned NEGACHIEKKU processing or authenticating processing is proper, and the response of the purport that processing of transactions is permitted or forbidden is transmitted to CAT1 (n56-n58).

[0026] In the above processing, n42 is equivalent to the amount-of-money for purchase write-in means of this invention, similarly n32 is equivalent to the amount-of-money read-out means for purchase, n36 is equivalent to the 2nd amount-of-money comparison means, and, similarly n37, n52, and n55 are equivalent to an excess state transmitting means. The sum total of the amount of money for the total which memorizes the total of the amount of money for dealings for one day on a credit card, and is memorized by the credit card at the time of the processing of transactions in CAT1, and this amount of money for dealings buys it, and it is compared with a surroundings limit by the above processing. Therefore, even if it is the case depended on a poor card at two or more stores where bought it and the surroundings are performed, this can be detected certainly and a stolen card etc. can be discovered quickly.

[0027] in addition -- preparing this in a controller 2 and setting for a controller 2, although [this example / the check file which is set as each card issuer and which bought it and memorized the surroundings limit] prepared for CAT1 -- the operation of the amount of money for the total -- and he buys it and it may be made to perform comparison processing with a surroundings limit.

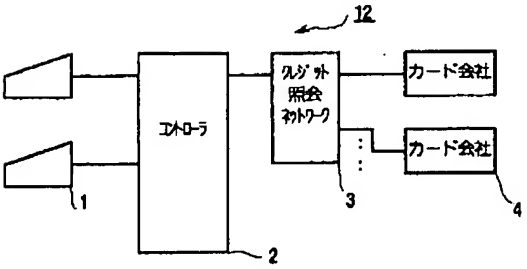
[0028]

[Effect of the Invention] When according to invention indicated to Claim 1 processing of transactions of a small sum is continuously performed comparatively by the same card and the amount of money for the total exceeds a fixed limit Since authenticating processing in each card issuer is performed even if the amount of money for dealings is a small amount, there is an unjust advantage by the multiple loanee or a stolen card which can buy it and can prevent the surroundings certainly.

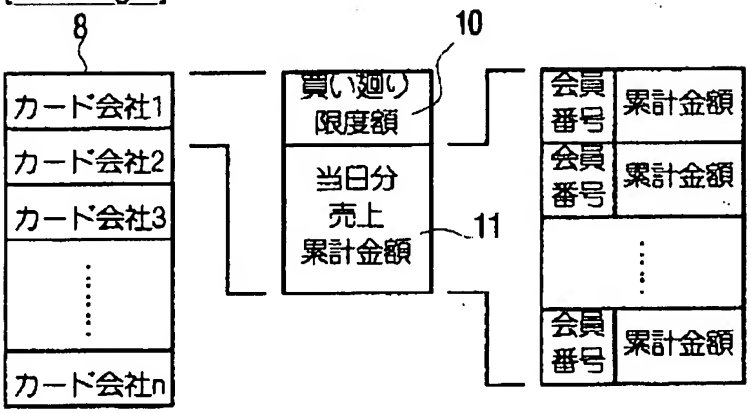
[0029] In order according to invention indicated to Claim 2 to buy it and to memorize the accumulated amount of the amount of money for purchase for one day as compared with a surroundings limit for card itself, even if it is the inaccurate ** [which he bought] case to which the surroundings were performed at two or more stores, when the amount of money for accumulation exceeds a fixed limit, there is an advantage which can detect this.

[Brief Description of the Drawings]
[Drawing 1] It is the figure showing the composition of the card processing system concerning the working example of invention indicated to Claim 1.
[Drawing 2] It is the figure showing the controller which constitutes this card processing system.
[Drawing 3] It is the figure showing the memory content of the check file which this controller has.
[Drawing 4] It is the flow chart which shows the procedure of this controller.
[Drawing 5] It is the figure showing the composition of the controller concerning the working example of invention indicated to Claim 2.
[Drawing 6] It is the block diagram showing the composition of the control section of CAT of this card processing system.
[Drawing 7] It is the figure showing the memory content of the card applied to this card processing system.
[Drawing 8] It is the flow chart which shows the procedure of this CAT.
[Drawing 9] It is the flow chart which shows processing of the controller of this card processing system.
[Explanations of letters or numerals]
1-CAT
2-controller
3-credit reference network
4-card issuer
7-NEGAFAIRU
8-check file
10 - He buys it and it is the surroundings limit memory section.
Amount-of-money memory section for 11-totals

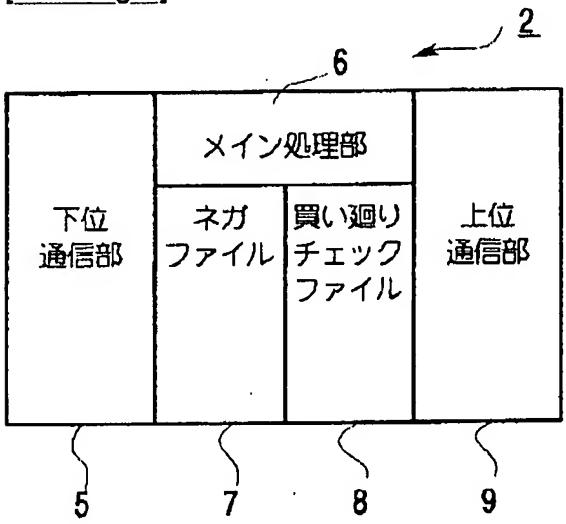
[Drawing 1]



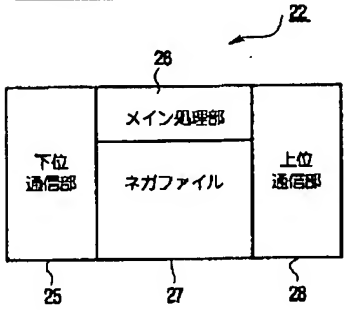
[Drawing 3]



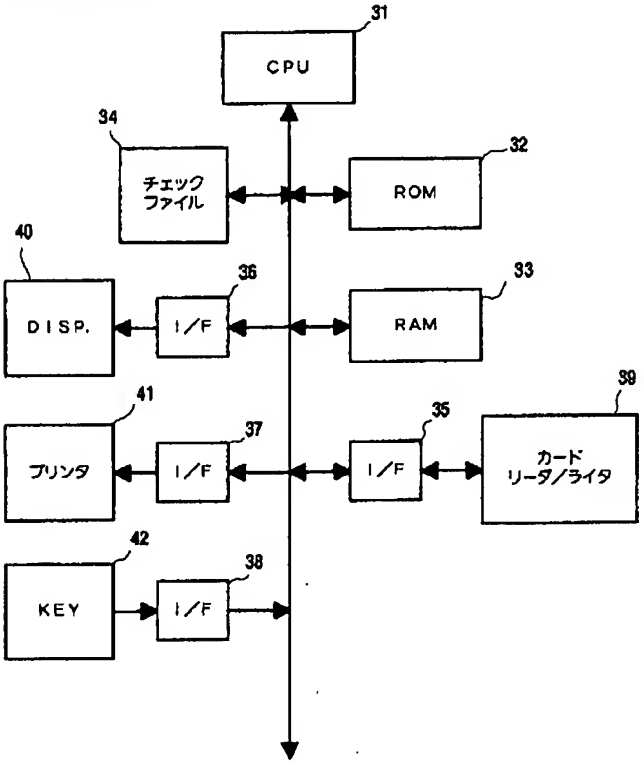
[Drawing 2]



[Drawing 5]



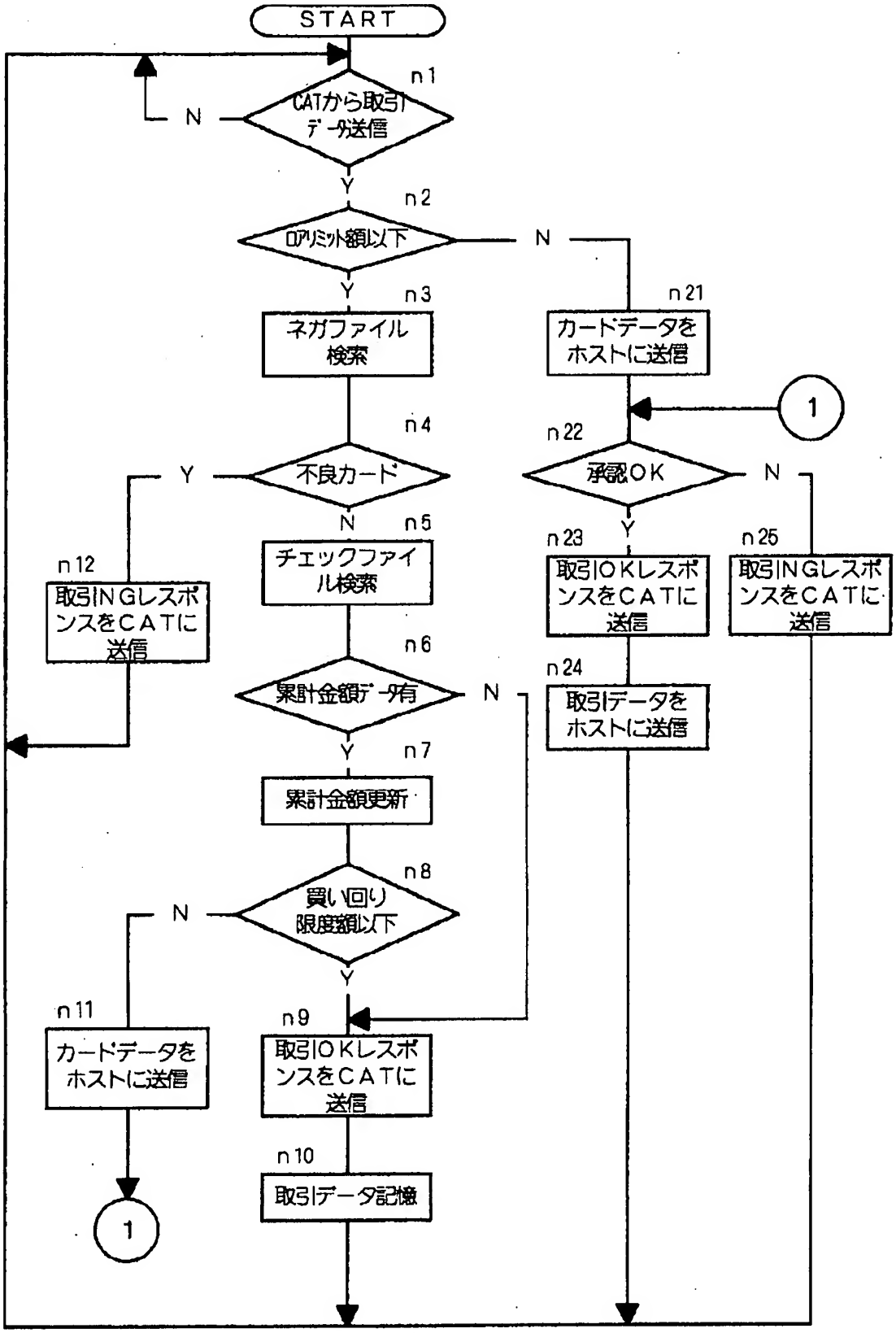
[Drawing 6]



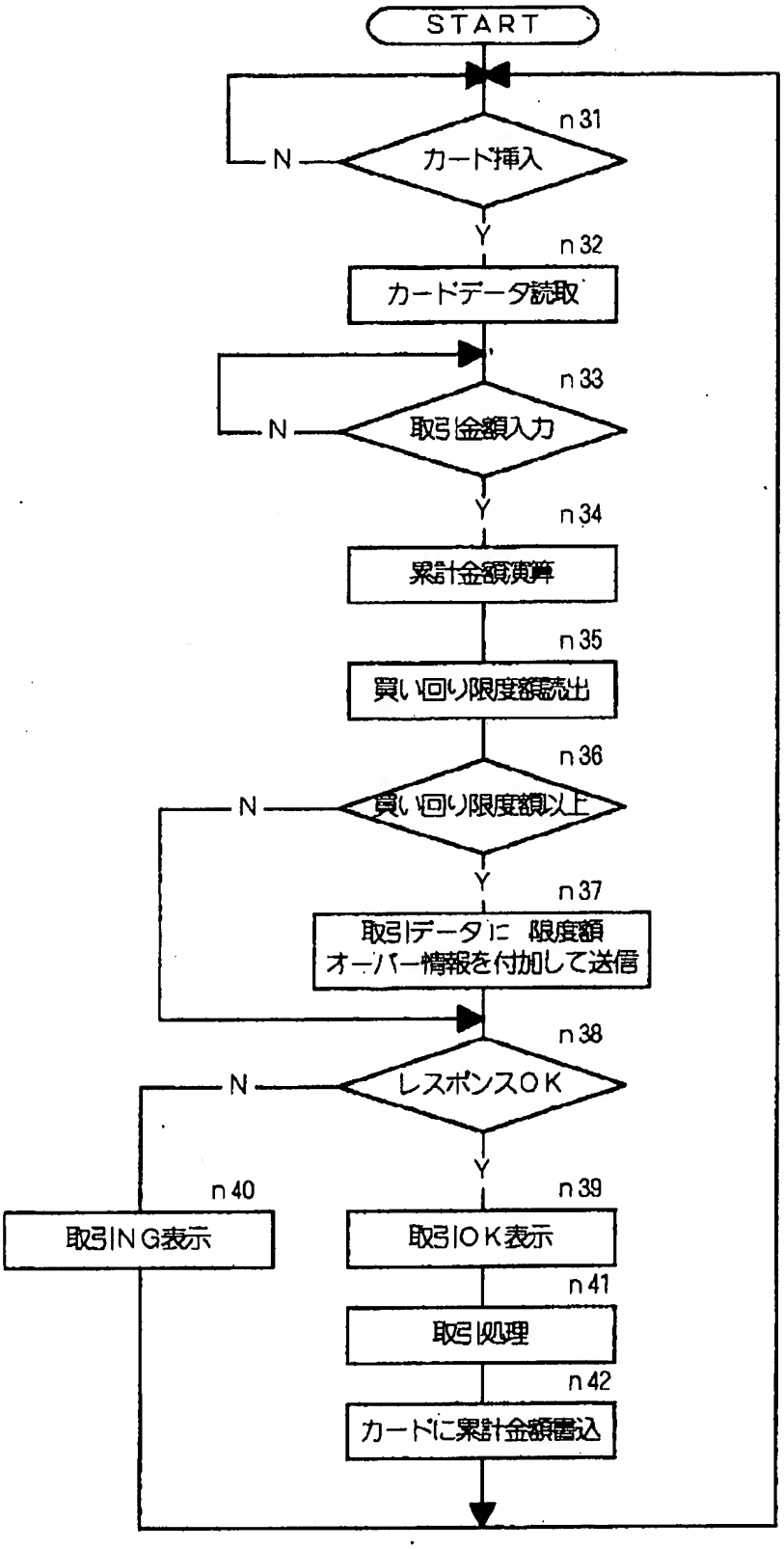
[Drawing 7]

	カード会社	会員番号	暗証番号	取引日付	累計金額	

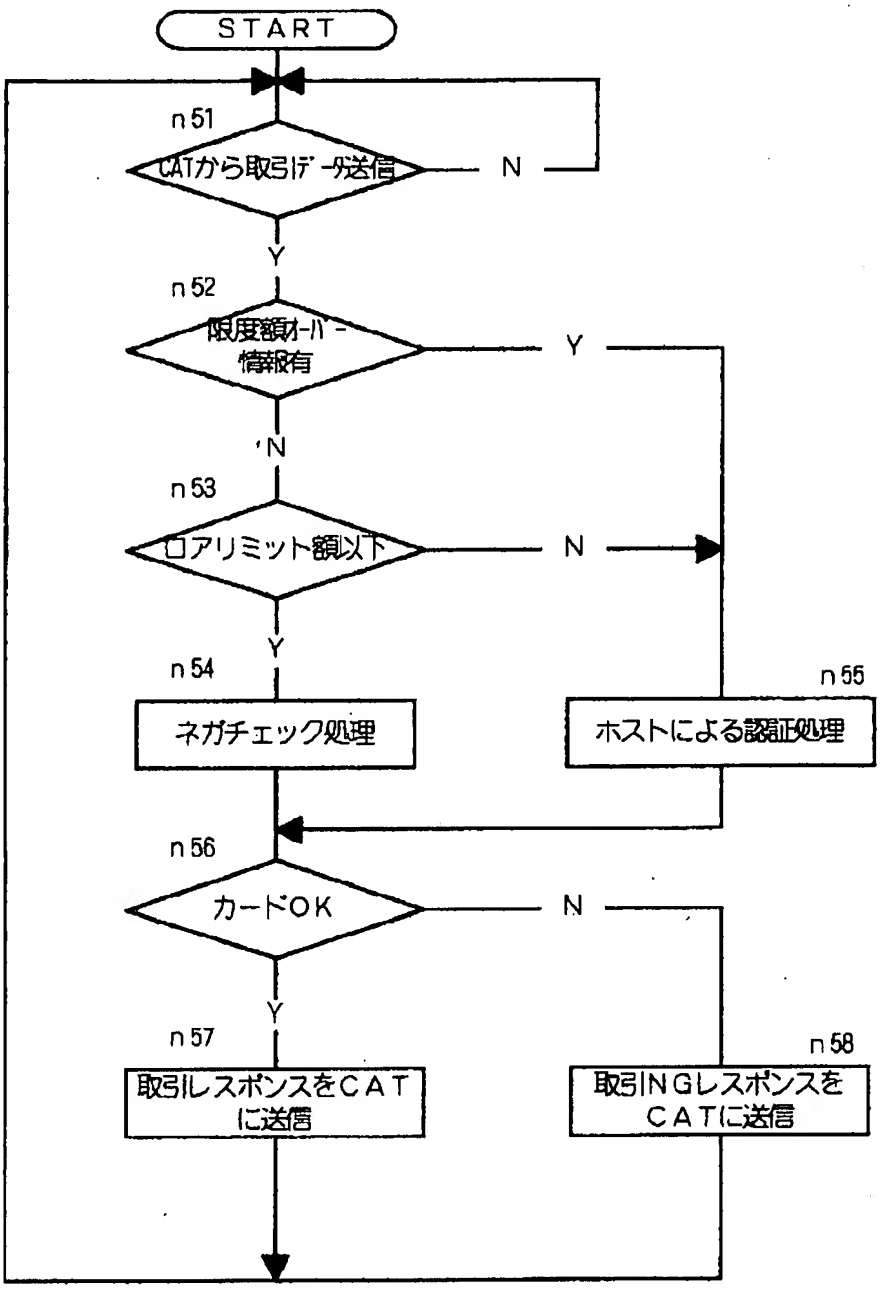
[Drawing 4]


START
n1
CATから取引データ送信
N
Y
n2
ロアリミット額以下
N
Y
n3
ネガファイル検索
n4
不良カード
Y
N
n5
チェックファイル検索
n6
累計金額データ有
N
Y
n7
累計金額更新
n8
買い回り限度額以下
N
Y
n12
取引NGレスポンスをCATに送信
n11
カードデータをホストに送信
1
n9
取引OKレスポンスをCATに送信
n10
取引データ記憶
n21
カードデータをホストに送信
1
n22
承認OK
N
Y
n23
取引OKレスポンスをCATに送信
n24
取引データをホストに送信
n25
取引NGレスポンスをCATに送信

[Drawing 8]


START
n31
N
カード挿入
Y
n32
カードデータ読取
n33
N
取引金額入力
Y
n34
累計金額演算
n35
買い回り限度額読出
n36
N
買い回り限度額以上
Y
n37
取引データに 限度額
オーバー情報を付加して送信
n38
N
レスポンスOK
Y
n40
取引NG表示
n39
取引OK表示
n41
取引処理
n42
カードに累計金額書込

[Drawing 9]



[Translation done.]

[JP,06-215009,A(1994)]

Japanese (PDF) | File Wrapper Information

FULL CONTENTS CLAIM + DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION TECHNICAL PROBLEM MEANS OPERATION EXAMPLE DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.]

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	B, U, Y	2500001

Select up to 3 technical dictionaries in order of priority.

Dictionary1: Electronic engineering
Dictionary2: Information communication technology (ICT)
Dictionary3: Technical term

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